EPA Jacket 66675-3 Vol.2

Material Sent for Data Extraction

		Reg # 66675-3
Des	cription	
中	Materia	I(s) Sent to Data Extraction Contractors:
		New Stamped Label Dated
		Notification Dated
		New CSF(s) Dated
	区	Other: Amendment
	Decision	#: 447048
	Other Ac	ction/Comments:
mus Ther	t be well on give the	versheet to the top of the material or jacket. It organized and clipped together, NOT STAPLED. material with this coversheet to staff in the ervices Center (Room S-4900).
Rev	viewer:	A DOWNS
Pho	ne:	Division: A)
Dat	e:	4/5/11

DECISION PKG. NO. 447048 SUBM. DUE DATE 4/4/1/
SUBMISSION BAR CODE # 88853/ REVIEWER AD
CODING FORM FOR APPLICATIONS FOR REGISTRATION/AMENDMENTS
FILE SYMBOL/REG NO. 46676-3 PM 33 ACTION CODE 308 PRIA
DESCRIPTOR Amenament FOPA NFOPA
[] CHILD RESISTANT PACKAGING: [] REQUIRED [] NOT REQUIRED
REGISTRATION TYPE: [] CONDITIONAL [] RESTRICTED USE
DATE ON APPLICATION EPA RECEIVE DATE 1 3 11 1 4 11 1 4 11
METHOD OF SUPPORT FORMULATORS EXEMPTION [] CITE-ALL [] SELECTIVE [] SUBMITTED [] NOT SUBMITTED [] N/A [] N/A
REVIEW(S) REQUESTED DATA DATE DUE DATE PACK # SENT DATE RETURNED
CHEMISTRY][][][]
BFFICACY][][][
- ACUTE TOX][][
RASSB TOX.
ENVIRON. FATÉ][][
FISH/WILDLIFE][][][][]
OTHER: : : : : : : : : : : : : : : : : : :
STATUS
RESPONSE CODE 1355 RESPONSE DATE 4/5/11



EPA Reg No. 66675-3, 66675-4 magna1@strato.net to: Karen Leavy

04/05/2011 09:20 AM

Dear Ms. Leavy,

Per our telephone conversation on April 5, 2011, I am repectfully withdrawing both DCI amendments for EPA Nos. 66675-3 and 66675-4.

I will follow up with you tomorrow, Wednesday, April 6, 2011 to complete my requirements for these amendments.

Thank you for your assistance in this matter.

Respectfully,

Susan Wright Manga-Bon II, LLC

mobile - 863-634-9233

office - 800-845-1357 / 863-357-0400



January 3, 2011

DOCUMENT PROCESSING DESK (AMEND)

Marshall Swindell
Project Manager, Team 33
Regulatory Management Branch I
Antimicrobials Division (7510P)
Office of Pesticide Programs
United States Environmental Protection Agency'
Ariel Rios Building
1200 Pennsylvania Ave, NW
Washington, DC 20460



Dear Mr. Swindell,

Subject: Magna-Bon Bahama Klear

EPA Reg. No. 66675-3

Final DCI changes to the label, EPA letter dated (attached)

We are in receipt of your letter dated September 29, 2010. We have made the changes to the label you had requested. In regards to the container cleaning and disposal, we have decided to add a separate label to the container. These instructions are listed on the last page of the label.

We are submitting the required label changes highlighted in yellow plus five (5) draft copies. We hope you find this satisfactory.

After your review, we request a stamped copy of the approved label for our records.

If you have any question, please contact me at your earliest convenience.

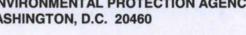
Sincerely,

Susan Wright General Manager

Attachments



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460



January 7, 2011

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

SUSAN WRIGHT MAGNA-BON II, LLC 1531 NW 25TH DRIVE OKEECHOBEE, FL 34972

PRODUCT NAME: MAGNA-BON BAHAMA KLEAR

COMPANY NAME: MAGNA-BON II, LLC

OPP IDENTIFICATION NUMBER: EPA FILE SYMBOL: 66675-3 EPA RECEIPT DATE: 01/06/11

SUBJECT: RECEIPT OF AMENDMENT

DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for an amendment and it has passed an administrative screen for completeness.

During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Antimicrobials Division, Risk Management Team 33, at (703) 308-6341.

Sincerely,

Front End Processing Staff Information Services Branch Information Technology & Resources Management Division

\$EPA	United States Environmental Protection Agency Washington, DC 20460			1	Registra Amenda Other		OPP Identifier Number		
		Applicatio	n for	Pestici	de - Sec	tion			
1. Company/Product Number Magna-Bon II, LLC / 66675-3				Marshall Swindell			oposed Classification		
4. Company/Product (Name) Magna-Bon Bahama Klear				PM# 33				-	
5. Name and Address of A Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, Fl. 34		ode)		(b)(i), n to: EPA I	Reg. No.	is sim	ilar or identi	ical in co	FIFRA Section 3(c)(3) mposition and labeling
			Sec	tion -	II	The second			
Amendment - Explain Resubmission in resubmission - Explain Notification - Explain Explanation: Use additional Part of the Internation Value	sponse to Agency lette			- [] - []	Final printe Agency let "Me Too"	ter dat Applica	ation.	to	
			Sect	tion - I	11				
			Water				2 Type of	Container	
	Unit Packaging Yes No				ackaging		2. Type of	Container Metal Plastic Glass	
Yes √ No * Certification must	Unit Packaging Yes	No. per	If "Yes	Soluble P Yes No				Metal Plastic	specify)
Child-Resistant Packaging Yes No * Certification must be submitted	Unit Packaging Yes No If "Yes" Unit Packaging wgt		If "Yes Packar	Soluble P Yes No " ge wgt	No. per containe			Metal Plastic Glass Paper Other (S	
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Yes Yes No * Certification must be submitted 3. Location of Net Content Label 6. Manner in Which Label in	Unit Packaging Yes No If "Yes" Unit Packaging wgt s Information Container s Affixed to Product	4. Size(s) Reta 1, 2.5, 15 Lithogr Paper Stencil	If "Yes Package ail Contain 5, 30, 55, aph glued ed Sect	Soluble P Yes No "ge wgt ner , 250, 27	No. per containe 5 gallon Othe	5. Lo	cation of Lab	Metal Plastic Glass Paper Other (S	application.)
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5. Date

1-3-2011

4. Typed Name

Susan Wright

BAHAMA KLEARTM Algicide/Bactericide/Fungicide

FOR SWIMMING POOLS, OUTDOOR HOT TUBS AND SPAS AND FOR USE ON RAW AGRICULTURAL COMMODITIES

Ingredients

Copper Sulfate Pentahydrate*(CAS No.7758-99-8)	19.8%
Other Ingredients	80.2%
Total	100.0%

^{*}Equivalent to 5.0% metallic copper A Chelated Copper Product

Keep Out Of the Reach of Children DANGER

	FIRST AID
If ON SKIN or CLOTHING	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF IN EYES	 Hold eye open and rinse slowly and gently with water for 15 20 minutes. Remove contact lenses, if present, after the first 5 minutes and then continue rinsing. Call a poison control center or doctor for treatment advice.
IF SWALLOWED	 Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to do so. Do not induce vomiting unless told to do so by a poison controcenter or doctor. Do not give anything to an unconscious person.
IF INHALED	 Move a person to fresh air. If person is not breathing, call 911 or an ambulance, and there give artificial respiration, preferably by mouth-to-mouth, possible. Call a poison control center or doctor for treatment advice.

going for treatment.

EPA REG. NO. 66675-3 EPA EST. NO. 66675-FL-001

Net Contents: 1 U.S. Gallon (3.78 Liters) - 9.9 lbs per U.S. Gallon (1.188 kg/l)

Amended August 7, 2007/ Page1 of 27

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- 3 In compliance with PR Notice 95-1, this effluent discharge statement will appear on containers that are equal to or greater than 50 lbs./5 gallons Per PR Notice 95-1, this language is not required for containers less than 50 pounds/5 gallons.
- 4 This is alternate Directions for Use language.

Manufactured by:

MAGNA-BON II, LLC 1531 NW 25th Drive Okeechobee, FL 34972 863-357-0400

For Emergency Assistance Call CHEMTREC 1-800-424-9300

STORAGE AND DISPOSAL

Prohibition: Do not contaminate water, food or feed by storage or disposal.

Storage: Store in a safe place away from PETS AND KEEP OUT OF THE REACH OF CHILDREN. Store away from excessive heat. Magna-Bon Bahama Klear will freeze. Always keep container closed. Store Magna-Bon Bahama Klear in its original container only. [Bulk Magna-Bon Bahama Klear shall be stored and handled in 316L stainless steel, fiberglass, PVC's, polypropylenes or plastic equipment.] ¹ Keep away from galvanized pipe and any nylon storage handling equipment.

Pesticide Disposal: Excess Magna-Bon Bahama Klear should be disposed of through label use. Do not contaminate lakes, rivers or streams as this may cause fish kill. [Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.] ² In the event of a spill, neutralize with limestone or baking soda before disposal. Concentrate may deteriorate concrete.

Container Disposal: Please see additional container label for Container Recycling or Disposal information.

PRECAUTIONARY STATEMENTS Hazards To Humans And Domestic Animals

DANGER. Corrosive: Fatal if absorbed through skin. Causes irreversible eye damage. Causes skin damage. Do not get on skin, in eyes, or on clothing. Harmful if swallowed. Wear coveralls over long sleeved shirt and long pants, goggle or face shield, chemical-resistant footwear plus socks and chemical resistant apron for mixing, loading and cleaning equipment, and chemical resistant headgear for overhead exposure.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff. This product has potential for runoff for several months or more after application. [Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.13

For Terrestrial Uses: This pesticide is toxic to fish and aquatic vertebrates and may contaminate water through runoff. Do not apply directly to water or areas where surface water is present or to intertidal areas below the mean high mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. This product may contaminate water through runoff. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Waters treated with this product may be hazardous to aquatic organisms. Treatment of aquatic weeds and algae can result in oxygen loss from decomposition of dead algae and weeds. This oxygen loss can cause fish and invertebrate suffocation. To minimize the hazard, do not treat more than ½ of the water body to avoid depletion of oxygen due to decaying vegetation. Wait at least 10 to 14 days between treatments. Begin treatment along the shore and proceed outwards in bands to allow fish to move into

Amended August 7, 2007/ Page2 of 27

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untreated areas. Consult with the State or local agency with primary responsibility for regulating pesticides before applying to public waters, to determine if a permit is required.

Certain water conditions including low pH (≤6.5), low dissolved organic carbon (DOC) levels (3.0 mg/L or lower), and "soft" waters (i.e. alkalinity less than 50 mg/L), increases the potential acute toxicity to non-target aquatic organisms.

Drift and runoff may be hazardous to aquatic organisms in waters adjacent to treated areas.

GENERAL INFORMATION

Magna-Bon Bahama Klear is a copper sulfate pentahydrate formulation used to control bacteria and algae in swimming pools and outdoor hot tubs and spas. It is used as a post harvest wash to control bacteria and fungi that cause spoilage in fruits and vegetables and is used on growing agricultural commodities to control bacteria and fungi.

Using water containing moderate to high amounts of sulfur may cause Magna-Bon Bahama Klear to neutralize. Whenever possible, use a compatibility jar test before mixing a whole tank.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This pesticide is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water when disposing washwaters or rinsate.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

Application:

For control of algae and odor causing bacteria in swimming pools, outdoor hot tubs and spas, add Magna-Bon Bahama Klear as per chart below.

	Water		Magna-Bon Bahama Klear
Swimming	15,000 Gal	11	1 - 3 Quarts
Pools:	30,000 Gal		2 - 6 Quarts
	60,000 Gal		4 -12 Quarts
Outdoor	235 Gal		1 Ounces
Hot Tubs	470 Gal		2 Ounces
and Spas:	700 Gal		3 Ounces

Application should be made before visible algae appear. Where visible algae is present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive build up of metallic copper. Magna-Bon Bahama Klear may be used at the higher rates to help control odors and algae during the winter months while the pool is not being used. Recommended application rates yield (1 ppm to 3 ppm) metallic copper.

[To control algae and bacteria in swimming pools, spas & hot tubs: Apply at the rate of 2 - 4 quarts of Magna-Bon Bahama Klear per 60,000 gallons. This will provide a level of 0.5 ppm to 1.0 ppm metallic

Amended August 7, 2007/ Page3 of 27

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copper. Application should be made before visible algae appear. Where visible algae are present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive buildup of metallic copper. Magna-Bon Bahama Klear may be used to help control pool odors and algae during winter months. Maintain the higher rate while the pool is not being used during the winter. Do not discharge treated pool effluent where it will drain into lakes, streams, ponds, or public water.] ⁴

General Algae/Bacteria Control:

For suppression of bacterial odors and for control of algae, apply in late spring or early summer when algae and bacteria first appear. The dosages are variable and depend upon algae/bacteria species, water hardness, water temperature, amount of algae/bacteria present, as well as whether water is clear, turbid, flowing or static. Preferably, the water should be clear with the temperature above 60 °F or 15.6 °C. Higher dosages are required at lower temperatures, higher algae/bacteria concentration, and for hard waters. Application should be done by pouring Magna-Bon Bahama Klear directly from the container into the pool, outdoor hot tub or spa. Several application points speed up dispersal. Static water requires less chemical for algae/bacteria control than does flowing water. Use higher dosages for Chara, Nitella and filamentous algae (pond scum), and lower dosages for planktonic algae. If there is uncertainty about the dosage, begin with a lower dose and increase until control is achieved, or until the maximum allowable level has been reached.

For Use as a Post Harvest Wash an Agricultural Commodities: To use as an algicide, bactericide, fungicide post harvest wash the following directions apply.

For use as a post harvest wash, this product may be applied with any type of application equipment that gives thorough and uniform coverage. Devices may include, but are not limited to, dunk and dip tanks, spray applicators or fogging.

Washing raw agricultural commodities will both clean and control bacteria and fungi that cause spoilage. Depending on water quality and cleaning conditions, or when adding new processing water, add from one hundred three (103) up to one hundred twenty eight (128) fluid ounces of Magna-Bon Bahama Klear per one thousand (1,000) gallons of water. Allow thorough coverage of the commodity and then let dry. Rinsing is not required or recommended.

Depending on water quality, cleaning conditions or when adding new processing water, start at lower rinse rates. Add Bahama Klear as per the chart below.

BAHAMA KLEAR

RINSE WATER

25.6 ounces to 32 ounces	250	gallons
51.2 ounces to 64 ounces	500	gallons
103 ounces to 128 ounces	1,000	gallons

Remember: Commodities need only be immersed long enough to allow complete coverage.

FOR USE AS A FUNGICIDE/BACTERICIDE ON GROWING AGRICULTURAL COMMODITIES: For use as a systemic fungicide/bactericide on growing agricultural commodities, the following directions apply.

GENERAL INSTRUCTIONS

Bahama Klear may be applied with any type of application equipment that gives uniform coverage of all foliage, including ground, aerial and low volume sprayers as specified on this label. Equipment used for application should be PVC or 316L stainless steel. Bahama Klear is compatible with most fungal and insecticidal biopesticides when applied at least two (2) days before or after application of the biopesticide.

Amended August 7, 2007/ Page4 of 27

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Phytotoxicity – Although Bahama Klear has been tested on a wide variety of fruits, vegetables and nuts without phytotoxicity, there could be some varieties and cultivars that because of environmental factors and stages of growth could possibly foster systems. The per acre use rate of Bahama Klear is applicable for dilute spraying. Depending on the equipment used and the specific crop, the spray volume applied per acre will differ. Refer to the Minimum Recommended Spray Volume Table. Complete spray coverage is essential to assure optimum performance from Bahama Klear. When treating by aerial application or with low volume application equipment, unless you have had specific previous experience, it is advisable to test for compatibility and tolerance to crop injury prior to full scale commercial utilization. GENERAL INSTRUCTIONS Cont.

Consult Bahama Klear label for specific rates and timing of application by crop. Where application rates and intervals are provided in a range (e.g., 2-4 fluid ounces and 7 to 10 days) the higher rates and shorter spray time intervals are recommended when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops. The use of a surfactant, such as Cell-U-Wett™ is acceptable for plants having waxy or hairy surfaces. Bahama Klear works via surface contact with the plants and materials being treated. It is important to ensure that all surfaces are thoroughly wetted. Bahama Klear does not produce any visible residue or have a distinct odor. It does have a residual, especially if applied with a surfactant.

SPECIAL PRECAUTIONS

- Do not mix with acidic compounds such as Alliette™ within 14 days before or after application of same.
- This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.
- Environmental conditions such as extended periods of wet weather, acid rain, etc., which alter the pH of the leaf surface may effect the performance of Bahama Klear resulting in possible phytotoxicity or loss of effectiveness.
- Do not mix with pot ash.
- It must be determined in the selection process if proper application equipment is available and if
 the waste associated with its use can be properly handled. Materials used on the construction of
 application equipment is also an important factor as agricultural chemicals are often reactive with
 soft metals such as aluminum and even some synthetic materials such as plastics, rubbers, etc..
 Therefore it is necessary when working with equipment containing these materials, that they are
 thoroughly flushed with clean water after each days use.

Personal Protective Equipment

Personal Protective Equipment: Some materials that are chemical-resistant to this product are listed below. Applicators and other handlers must wear:

- Long sleeved shirt
- Long pants
- Chemical resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride or viton
- Protective eyewear
- Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with product's concentrate. Do not re-use them.

Amended August 7, 2007/ Page5 of 27

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USER SAFETY RECOMMENDATIONS

Users should:

- User should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- User should remove PPE immediately after handling product. As soon as possible, wash thoroughly a change into clean clothing.
- Wash the outside of gloves before removing.
- As son as possible wash thoroughly and change into clean clothing.
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.
- Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Workers Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of

Do not enter or allow others to enter until sprays have dried.

PPE required for early entry to treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, water, is: coveralls, protective eyewear, chemical resistant gloves, and shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Workers Protection Standard for agricultural pesticides, 40 CFR part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Do not allow re-entry into treated areas until sprays have dried.

GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: Sprinkler including center pivot, lateral move, end row, side (wheel) roll, traveler, big gun, solid set or hand move: flood (basin); furrow; border or drip (trickle) irrigation and system(s). Do not apply this product through any other type of irrigation systems.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

Amended August 7, 2007/ Page6 of 27

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If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety device for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Posting areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds or other public facilities not including public roads, or 2) when chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has

GENERAL CHEMIGATION INSTRUCTIONS Cont'd.

disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters of at least 2 ½ inches tall, and all letters and the symbol shall be in a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

This sign is in addition to any sign posted to comply with the Workers Protection Standard.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete break (air gap) between the flow outlet end of the fill pipe and the top of the overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of liquid back toward the injection.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

Amended August 7, 2007/ Page7 of 27

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The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

When mixing, agitation is not necessary. Adjust the pH of the water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add Bahama Klear last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures.

Bahama Klear may be added through a traveling system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

SPRINKLER CHEMIGATION

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement pump (i.e., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the Bahama Klear last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures.

May be added through a traveling irrigation system or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

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FLOOR (BASIN), FURROW AND BORDER CHEMIGATION

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination back flow.
- b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of liquid back toward the injection pump.
- c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- f. Systems must use a metering pump, such as a positive displacement pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the Bahama Klear **last**. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the labels of all products used on the mixtures.

Bahama Klear may be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

DRIP (TRICKLE) CHEMIGATION

The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of liquid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor pump stops.

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The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump such as a positive displacement injection pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc, add the Bahama Klear **last**. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures. Bahama Klear may be added through a traveling irrigation system continuously or at the last 30 of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

FOR SPRAY AND SOIL DRENCH APPLICATIONS

Always spray for total foliage coverage. When re-spraying the rates and severity of the disease vary with unforeseen conditions. However, in the event of severe disease, spraying intervals can be shortened to 3 to 5 days. At times, lower rates can be as effective as higher rates and should be tried first. Usually, preventive programs may be maintained at lower rates. Use of low volume spraying is effective against Botrytis and not effective against established powdery mildew and Xanthomonas infections. Also, applications on actively growing tissue may be more effective than applications on dormant tissue.

MINIMUM RECOMMENDED SPRAY VOLUME (GALLONS) PER ACRE WHEN APPLYING BAHAMA KLEAR

		GROUND			
CROP	AERIAL	DILUTE	CONCENTRATE*		
Vegetables	3	20	30		
Field Crops	3	20	30		
Small Fruits	5	150	30		
Vines	5	150	30		
Tree Crops	10	400	50		
Citrus	10	125	30		

*Pesticide application equipment such as Curtec® or other similar sprayers which are capable of obtaining coverage at low volumes may be used at as low as 20 gpa of spray volume.

The following specific instructions are based on general application procedures. The recommendations of the State Extension Service should be closely followed as to timing, frequency and numbers of sprays per season.

FROST INJURY PROTECTION BACTERIAL ICE NUCLEATION INHIBITOR

Application of Bahama Klear made to all crops listed on this label at rates and stages of growth indicated on this label, at least 24 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria (Pseudomonas syringae, Erwinia herbicola and Pseudomonas flourescens) and

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may therefore provide some protection against light frost. Not recommended for those geographical areas where weather conditions favor severe frost.

The chart below is used to calculate correct ppm's* of active ingredient (A.I.) per volume of carrier water. These volumes can be used for either conventional or concentrated sprays.

AMOUNT OF BAHAMA KLEAR PER VOLUME OF WATER FOR PROPER PPM'S* OF APPLIED ACTIVE INGREDIENT (AS COPPER)

	TORTROI ERTTING OF ALTELED ACTIVE INCREDIENT (ACCOUNTER)					
ppm's* of A.I.	30 gallons per acre	50 gallons per Acre	100 gallons per Acre	125 gallons per Acre	250 gallons per Acre	500 gallons per Acre
50	3.85 oz.	6.4 oz.	12.8 oz.	16 oz.	32 oz.	64 oz.
75	5.78 oz.	9.6 oz.	19.2 oz.	24 oz.	48 oz.	96 oz.
100	7.70 oz.	12.8 oz.	25.6 oz.	32. oz.	64 oz.	1 gal.
125	9.6 oz.	16 oz.	32 oz.	40 oz.	80 oz.	1.25 gal.
150	11.5 oz.	19.2 oz.	38.4 oz.	48 oz.	96 oz.	1.5 gal.
200	15.4 oz.	25.6 oz.	51.2 oz.	64 oz.	1 gal.	2 gal.
250	19.2 oz.	32 oz.	64 oz.	80 oz.	1.25 gal.	2.5 gal.

^{*} ppm = parts per million (as copper)

CITRUS

Grapefruit, Kumquat, Lemon, Lime, Orange, Tangelo, Tangerine

Disease	Rate per Acre	ppm's (copper) per 100 gallons of water	Instructions
Brown Rot	30-70 oz.	120-275 ppm	Apply at first indication of rain or first appearance of Brown Rot. Re-apply as needed during wet weather.
Greasy Spot, Pink Pitting	25.6-64 oz.	100-250 ppm	Apply during mid-summer.
Scab	25.6-64 oz.	100-250 ppm	Apply shortly before trees begin to flush. Re-apply at 2/3 petal fall. Re-apply 4 weeks later, if necessary.
Melanose	25.6-64 oz.	100-250 ppm	Apply 2 times per year before the onset of spring and autumn rains.
Canker (Suppression)	12.8-64 oz.	50-250 ppm	Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require additional applications. Number and timing of applications will be dependent on disease pressure. Under heavy pressure, each new flush of growth should be sprayed. Heavily infected trees should be sprayed with a minimum dosage of 250 ppm with
12.6 lb. ²	7 days³	3.15 lb1	a follow up spray after 7-14 days at 200 ppm.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³

Amended August 7, 2007/ Page11 of 27

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FIELD CROPS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Alfalfa	Cercospora Leaf Spot, Leptosphaerulina Leaf Spot	19.2-32 oz.	7.5-125 ppm 0.53 lbs ¹	Apply 10 to 14 days before each harvest or earlier if disease threatens. NOTE: Spray injury may occur with sensitive varieties such as Lahontan.
Corn (Field Corn, Popcorn, Sweet corn)	Bacterial Stalk Rot 4.2 lb.²	19.2-32 oz. 7 days³	75-125 ppm	Begin treatment when disease first appears and repeat every 7 to 10 days or as needed. Use the higher rates and shorter spray intervals when conditions favor disease. *
Peanut	Cercospora leaf Spot	19.2-25.6 oz.	75-100 ppm	Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14 day intervals or as needed. Reduce sprays to 7 day intervals during humid weather. Use the higher rates when
Potato	4.74 lb.² Early Blight, Late Blight 25 lb.²	7 days ³ 19.2-32 oz. 5 days ³	0.79 lb. ¹ 75-125 ppm	conditions favor disease. Apply 75 to 125 ppm at 7 to 10 day intervals or as needed starting when plants are 2 to 6 inches high in locations where disease is light. Add up to 32 oz. per acre when disease is more severe.
Sugar Beets	Cercospora Leaf Spot 7.86 lb.²	19.2-38.4 oz.	75-150 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use higher rates when conditions favor disease. Addition of a sticker/spreader is recommended.
Wheat, Barley, Oats	Helminthosporium Spot Blotch, Septoria Leaf Blotch	19.2-25.6 oz.	75-100 ppm	Make First application at early heading and follow with second spray 10 days later. Use the higher rates when conditions favor
	1.06 lb. ²	10 days³	0.53 lb.1	disease.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³
Not Permitted in California

Amended August 7, 2007/ Page12 of 27

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SMALL FRUITS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Blackberry (Aurora, Boysen, Cascade, Chehalem,	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dormant spray after pruning/training in the spring. If needed, agricultural-type spray oil may be added.
Logan, Marion, Santiam, Thornless Evergreen)	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	Low 19.2 oz.	75 ppm	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
Blueberry	Bacterial Canker	32-51.2 oz.	125-200 ppm	Make application before fall rains and a second application 4 weeks later. Use the higher rates when conditions favor disease.*
	Fruit Rot, Phomopsis Twig Blight 8.4 lb. ²	25.6-51.2 oz.	100-200 ppm	Dormant Application: Begin applications when bloom buds begin to swell. Make additional applications at 10 to 14 day intervals or as needed before blooms open.
Cranberry	Fruit Rot	51.2 oz.	200 ppm	Make application in late bloom. Apply one or two additional applications at 10 to 14 day intervals or as needed depending on disease severity.
	Rose Bloom	51.2 oz.	200 ppm	Apply three sprays on 10 to 14 day schedule or as needed as soon as symptoms are observed.
	Bacterial Stem Canker	51.2 oz.	200 ppm	Apply post harvest and again in spring at bud swell. Apply one or two additional applications at 10 to 14 intervals or as needed depending on disease severity.
	Leaf Blight, Red Leaf Spot, Stem Blight, Tip Blight (<i>Monilinia</i>) 6.3 lb. ²	51.2 oz. 7 days³	200 ppm 2.1 lb. ¹	Apply delayed dormant spray in the spring. Repeat at 10 to 14 day intervals or as needed through pre-bloom.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³
Not Permitted in California*

Amended August 7, 2007/ Page13 of 27

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SMALL FRUITS (cont'd)

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Currant, Gooseberry	Anthracnose, Leaf Spot	64 oz.	250 ppm 2.5 lb.1	Make Initial application after first leaves have expanded. Continue on a 10 to 14 day schedule or as needed during wet conditions in the spring. Make an additional application after harvest.
Raspberry	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dormant spray after training in the spring. If needed, agricultural-type spray oil may be added.
	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	Low 19.2 oz.	75 ppm	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of
Strawberry	10.0 lb. ² Angular Leaf Spot	7 days ³ 19.2 25.6 oz.	2.0 lb. ¹ 75-100 ppm	crop injury appear. Begin application when plants are
Guawberry	(Xanthomonas), Leaf Blight, Leaf Scorch, Leaf Spot	13.2 23.0 02.		established and continue on a weekly schedule throughout the season. Apply in at least 20 gallons of water. Use the higher rates when conditions favor disease.
	8.19 lb. ²	7 days³	1.5(severe disease) 1.0 lb. ¹	NOTE: Discontinue applications if signs of crop injury appear.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²

Minimum Retreatment Interval³

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TREE CROPS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Almond, Apricot, Cherry, Plum Prune	Bacterial Blast (Pseudomonas), Bacterial Canker, Coryneum Blight (Shot Hole)	51.2-64 oz.	200-250 ppm	Make first application before fall rains and a second at late dormant. Use the higher rates when conditions favor disease. If needed, agricultural-type spray oil may be added. For Cherries: Where disease is severe, an additional application shortly after harvest may be required. NOTE: Foliar injury may occur from post-bloom sprays on almonds, especially on NePlus varieties.
	Blossom Brown Rot, Coryneum Blight (Shot Hole)	51.2-64 oz. on almond, All others 60-90 oz.	200-250 ppm	Apply during early bloom. Do not apply after full bloom or injury may occur. Use the higher rates when rainfall is heavy and disease pressure is high.
	Black Knot* (Plum)	32-64 oz.	125-250 ppm	Make application at bud swell up to early bloom for early disease suppression. Apply before full bloom. Use the higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury, do not use after full bloom.
	Cherry Leaf Spot* (Sour Cherries Only)	38.4-64 oz. Dormant/ Late Dormant 7	150-250 ppm	Apply at petal fall as well as 1 to 2 times after petal fall. Use the lower rates where disease infection is light and use the higher rates for a dormant application or where disease infection is moderate to heavy. Do not apply to sweet cherry or the English Morello variety as
		days Bloom/growing season 5	8.0 lb. ¹	severe injury will result. NOTE: Moderate to severe injury such as leaf spotting and defoliation may occur from post bloom
	18.0 lb. ²	days ³	1.5 lb.1	applications.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³

Amended August 7, 2007/ Page 15 of 27

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Apple	Anthracnose, Blossom Blast, European Canker (Necria), Shoot Blast (Pseudomonas)	51.2-64 oz.	200-250 ppm	Apply before fall rains. Use the higher rates when conditions favor disease. NOTE: Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.
	Apple Scab, Fire Blight	High 51.2-64 oz.	200-250 ppm	Make application between silver- tip and green-tip. Apply as a full cover spray for early season disease suppression. NOTE: Moderate to severe crop injury may occur from late application; discontinue use when green-tip reaches ½ inch.
	Apple Scab	Low 19.2-25.6 oz.	75-125 ppm	Extended spray schedule where fruit finish is not a concern:
	Fire Blight	Low 19.2-25.6 oz.	75-100 ppm	Continued applications may be made at 5 to 7 day intervals or as needed between ½ inch green-tip and first cover spray. NOTE: Moderate to severe crop injury may result from this extended spray schedule. It is not intended for fresh market apples or for apples where fruit finish is a concern as it is likely to cause fruit russetting.
	Collar Rot, Crown Rot	32 oz. n/a(only 1 application per season permitted ³	125 ppm Fall, late dormant 8.0 lb ¹	Mix 100 gallons of water. Apply 4 gallons of solution as a drench on the lower trunk area of each tree. Apply in early spring or in fall after harvest for beast results. Do not apply to foliage or fruit.
Avocado	Anthracnose, Blotch, Scab	5 days ³ 51.2-64 oz.	0.5 lb. ¹ 200-250 ppm	Apply when bloom buds begin to swell and continue application at monthly intervals for five to six applications. Use the higher rates
	18.9 lb. ²	14 days³	3.15 lb.1	when conditions favor disease.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³

Amended August 7, 2007/ Page 16 of 27

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Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Sigatoka (Black and Yellow)	19.2 oz.	75 ppm	Apply by air in 3 gallons of water. If needed, agricultural-type spray oil may be added. Apply on a 14 day schedule or as needed throughout the wet season. Apply at 21 day intervals or as needed during dry periods.
			Mix 100 gallons of water. Apply to the fruit stem and the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.
Black Pod	19.2-64 oz.	75-250 ppm	Begin applications at the start of the rainy season and continue while infection conditions persist.
Coffee Berry Disease (Collectotrichum coffeanum)	38.4-64 oz.	150-250 ppm	Apply first spray after flowering and before onset of long rains and then at 21 to 28 day intervals or as needed until picking. Use the higher rates when conditions favor disease.
Bacterial Blight (Pseudomonas syringae)	38.4-64 oz.	150-250 ppm	Begin spray program before the onset of long rainy periods and continue throughout the rainy season at 14 to 21 day intervals or as needed. The critical time for spraying to control disease is just before, during and after flowering(s), especially when coinciding with wet weather. Use the higher rates when rainfall is heavy and disease pressure is high.
Leaf Rust (Hemileia vastatrix)	19.2-32 oz.	75 ppm	Apply before the onset of rain and then at 21 day intervals or as needed while the rains continue. Use the higher rates when rainfall is heavy and disease pressure is high.
Iron Spot. (<i>Cercospora</i> coffeicola), Pink Disease (<i>Cortium salmonicolor</i>) 12.6 lb. ²	19.2 oz.	75 ppm	Use concentrate or dilute spray. Begin treatment at the start of wet season and continue at monthly intervals for three applications.
	Sigatoka (Black and Yellow) Black Pitting 18.9 lb.² Black Pod 15.75 lb.² Coffee Berry Disease (Collectotrichum coffeanum) Bacterial Blight (Pseudomonas syringae) Leaf Rust (Hemileia vastatrix) Iron Spot. (Cercospora coffeicola), Pink Disease (Cortium salmonicolor)	Sigatoka (Black and Yellow) Black Pitting 32 oz. 18.9 lb.² 7 days³ Black Pod 19.2-64 oz. 15.75 lb.² Coffee Berry Disease (Collectotrichum coffeanum) Bacterial Blight (Pseudomonas syringae) Leaf Rust (Hemileia vastatrix) 19.2 oz. 19.2 oz.	Sigatoka (Black and Yellow) Black Pitting 32 oz. 19.2 oz. 75 ppm 18.9 lb.² Black Pod 19.2-64 oz. 15.75 lb.² Coffee Berry Disease (Collectotrichum coffeanum) Bacterial Blight (Pseudomonas syringae) Leaf Rust (Hemileia vastatrix) 19.2 oz. 75 ppm 125 ppm 105 lb.¹ 75-250 ppm 150-250 ppm 150-250 ppm 150-250 ppm 150-250 ppm

Maximum per Application Rate (lbs Cu²+/A)¹ Maximum Annual Rate (lbs Cu²+/A)²

Minimum Retreatment Interval³

Amended August 7, 2007/ Page 17 of 27

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Filbert	Bacterial Blight	64-128 oz.	250-500 ppm	Apply as a post harvest spray. In seasons of heavy rainfall, apply a second spray when three fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added.**
	Eastern Filbert Blight 24.0 lbs. ²	64-128 oz.	250-500 ppm	Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 2 week intervals or as needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added.
Mango	Anthracnose	38.4-64 oz.	150-250 ppm	Apply monthly after fruit set until harvest. Use the higher rates when rainfall is heavy and disease
	18.2 lb. ²	30 days³	2.6 lb.1	pressure is high.*
Olive	Olive Knot, Peacock Spot	64-76.8 oz.	250-300 ppm	Make first application before winter rains begin. A second application in early spring should be made if disease is severe. Apply the higher rates for heavy disease pressure or when conditions favor disease
Peach, Nectarine	6.3 lb.² Bacterial Blast (Pseudomonas), Bacterial Canker, Bacterial Spot (Xanthomonas), Coryneum Blight (Shot Hole), Leaf Curl	30 days ³ 51.2-76.8 oz	200-300 ppm	development. Make first application before fall rains and a second at late dormant. For peach leaf curl, late dormant application must be made before leaf buds swell. Use the higher rates when rainfall and disease pressure is high. If needed, agricultural-type spray oil may be added.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³

Permitted only in Washington State and Oregon**

Not permitted in California*

Amended August 7, 2007/ Page 18 of 27

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Peach, Nectarine	Blossom Brown Rot, Coryneum Blight (Shot Hole), Leaf Curl	51.2-76.8 oz.	200-300 ppm	Full cover spray at pink bud. Use the higher rates when conditions favor disease.
	Bacterial Spot 18.0 lb.	19.2 oz. Dormant, late dormant 7 days Bloom/ growing season 5 days	75 ppm 8.0 lb. 1.5 lb.	Post-bloom application applied at first and second cover sprays. NOTE: do not spray 3 weeks prior to harvest. Use only recommended rates. Spotting of leaves and defoliation may occur from use in cover sprays.
Pear	Fire Blight	19.2 oz.	75 ppm	Apply 5 day intervals or as needed throughout the bloom period. NOTE: Russetting may occur in copper sensitive varieties. Excessive dosages may cause fruit russet on any variety.
	Blossom Blast (Pseudomonas)	Fall – 1 time per season³ Bloom/growing	0.8 lb.1	Apply before fall rains and again during dormancy before spring growth starts. Use the higher rates when disease pressure is high or when conditions favor disease development.
Pecan	16.0 lb.² Kernel Rot, Shuck Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella pyramidalis)	5 days³ 19.2-32 oz.	0.5 lb. ¹ 75-125 ppm	For suppression, apply in sufficient water to ensure complete spray coverage at 2 to 4 week intervals or as needed, starting at kernel growth and continue until shucks open. Use the higher rates and shorter spray intervals if frequent rainfall occurs.
	Ball Moss, Spanish Moss 8.4 lb. ²	38.4-64 oz.	150-250 ppm 2.1 lb.1	Apply in 100 gallons of water in the spring when ball moss is actively growing, using 1 ½ gallons of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. The addition of a non-ionic surfactant will improve control. A second application may be required after 12 months.

Maximum per Application Rate (lbs Cu²+/A)1 Maximum Annual Rate (lbs Cu2+/A)2 Minimum Retreatment Interval³

Amended August 7, 2007/ Page 19 of 27

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Pistachio	Botryosphaeria Panicle and Shoot Blight, Botytris Blight, Late Blight (<i>Alternaria</i> alternata), Septoria Leaf Blight 8.4 lb. ²	32-64 oz.	125-250 ppm 2.1 lb.1	Make initial application at bud swell and repeat on a 14 to 28 day schedule or as needed. If disease conditions are severe, use the higher rates and shorter spray intervals.
Quince	Fire Blight 16.0 lb. ²	19.2 oz. Fall, 1 time ³ Bloom, 5 days ³	75 ppm 8.0 lb. ¹ 0.5 lb. ¹	Apply at 5 day intervals or as needed throughout the bloom period. Apply in adequate water for thorough coverage.**
Walnut	Walnut Blight	38.4-64 oz.	150-250 ppm	Apply at first spray at early pre-bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage or as needed when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves and nutlets is essential for effective control. NOTE: Adequate control may not be obtained when copper tolerant species of <i>Xanthomonas</i> bacteria are
	25.2 lb. ²	7 days³	3.15 lb.1	present.

VEGETABLES

	*LOL INDLLO					
Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions		
Bean (Dry, Green)	Brown Spot, Common Blight, Halo Blight	19.2-25.6 oz. 7 days³	75-100 ppm 2.0 lb ¹	For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14 day schedule or as needed depending on environmental conditions. Use the higher rates for more severe disease.		
Beet (Table Beet, Beet Greens)	Cercospora Leaf Spot 7.86 lb. ²	19.2-32 oz.	75-125 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use the higher rates when conditions favor disease.		
Carrot	Alternaria Leaf Spot, Cercospora Leaf Spot 5.0 lb. ²	19.2 oz. 7 days³	75 ppm	Begin applications when disease first threatens and repeat at 7 to14 day intervals or as needed depending on disease severity.		

Maximum per Application Rate (lbs Cu2+/A)1

Maximum Annual Rate (lbs Cu2+/A)2

Minimum Retreatment Interval³

Quince use not permitted in California**

Amended August 7, 2007/ Page20 of 27

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- 4 This is alternate Directions for Use language.

VEGETABLES (cont'd)

Crop	Disease	Rate /Acre	ppm's (copper) per 100 gallons of water	Instructions
Celery, Celeriac	Bacterial Blight, Cercospora Early Blight, Septoria Late Blight	19.2 oz.	75 ppm	Begin applications as soon as plants are first established in the field, repeating at 5 to 7 day intervals or as needed depending on disease severity and
Crucifers (Broccoli, Brussel Sprout, Cabbage, Cauliflower, Collard Greens, Mustard Greens, Turnip	5.3 lb.² Black Leaf Spot (Alternia), Black Rot (Xanthomonas), Downy Mildew	7 days ³ 19.2-25.6 oz.	75-100 ppm	environmental conditions.** Begin application after transplants are set in the field, or shortly after emergence of field seeded crops or when conditions favor disease development. Apply at 7 to 10 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage.
Greens) Cucurbits (Cantaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon)	2.65 lb. ² Alternia Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Powdery Mildew, Watermelon Bacterial Fruit Blotch (suppression)	7 days ³ 19.2-25.6 oz. 5 days ³	0.53 lb. ¹ 75-100 ppm 1.05 lb. ¹	Begin applications prior to disease development and continue while conditions are favorable for disease development. Repeat at 5 to 7 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	19.2 oz.	75 ppm	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals or as needed
Okra	7.9 lb.² Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spot, Powdery Mildew 5.25 lb.²	7 days ³ 19.2-32 oz. 5 days ³	0.79 lb. ¹ 75 ppm	depending on disease severity. Begin treatment when disease first threatens and repeat every 5 to 10 days or as needed depending on disease severity. Use the higher rates and shorter spray intervals when conditions favor disease.*

Maximum per Application Rate (lbs Cu2+/A)1 Maximum Annual Rate (lbs Cu2+/A)2 Minimum Retreatment Interval³ Not for Use Celeriac in California** Not for Use in California*

Amended August 7, 2007/ Page21 of 27

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VEGETABLES (cont'd)

Crop	Disease	Rate /Acre	ppm's (copper) per 100 gallons of water	Instructions
Onion, Garlic	Bacterial Blight, Downy Mildew, Purple Blotch	19.2 oz.	75 ppm	Begin when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals or as needed depending on disease severity. Can cause
	6.0 lb. ²	7 days³	1.0 lb.1	phytotoxicity to leaves.
Pea	Powdery Mildew	19.2-25.6 oz.	75-100 ppm	Begin applications when disease symptoms first appear and repeat weekly intervals or as needed. Use the higher rates when conditions favor
	3.95 lb. ²	7 days³	0.79 lb.1	disease.
Pepper	Anthracnose, Bacterial Spot, Cercospora Leaf Spot	19.2- 25.6 oz.	75-100 ppm	Begin applications when conditions first favor disease development and repeat at 7 to 10 day intervals or as needed depending on disease severity. Use the higher rates when
	11.85 lb. ²	3 days³	0.79 lb.1	conditions favor disease.
Spinach	Anthracnose, Blue Mold, Cercospora Leaf Spot, White Rust	19-25.6 oz.	75-100 ppm 0.79 lb.1	Begin application when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Flecking may occur on spinach leaves.
Tomato	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot 17.4 lb. ²	19.2-32 oz.	75-125 ppm 0.53 lb. ¹	Begin applications when disease first threatens and repeat at 5 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.
Watercress	Cercospora, Leaf Spot	19.2 oz.	75 ppm	Begin applications when plants are first established in the field, repeating at 7 to 14 day intervals or as needed depending on disease severity. Do not exceed four applications per crop. Apply using ground spray equipment at no less than 50 gallons of spray
	2.12 lb. ²	7 days³	0.53 lb.1	solution per acre.*

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³
Not for use in California*

Amended August 7, 2007/ Page22 of 27

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VINES

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Grape	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	19.2-32 oz.	75-125 ppm	Begin applications at bud break with subsequent applications throughout the season depending on disease severity. Use the higher rates when conditions favor disease. NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara and Rosette.
Hops	Downy Mildew 2.65 lb.²	19.2 oz.	75 ppm 0.53 lb. ¹	Make crown treatments after pruning, but before training. After Training, additional treatments are needed at about 10 day intervals. NOTE: Discontinue use two weeks before harvest.
Kiwi	Erwinia herbicola, Pseudomonas flourescens, Pseudomonas syrinsae 6.3 lb.²	38.4 oz.	150 ppm	Apply in 200 gallons of water per acre. Make applications on a monthly basis. A maximum of three applications may be made.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²

Minimum Retreatment Interval³

Amended August 7, 2007/ Page23 of 27

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MISCELLANEOUS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Atemoya	Anthracnose	25.6-38.4 oz.	100-150 ppm 3.15 lb.1	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease*.
Carambola	Anthracnose	38.4-51.2 oz.	150-200 ppm 2.1 lb.1	Make initial application before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.*
Chives	Downy Mildew 2.65 lb. ²	19.2 oz.	75 ppm 0.53 lb. ¹	Begin application when plants are established in the field. Repeat every 7 to 10 days or as needed depending on disease conditions.*
Dill	Phoma Leaf Spot, Rhizoctonia Foliage Blight	19.2-25.6 oz	75-100 ppm	Begin applications when plants are first established in the field and repeat at 7-10 day intervals or as needed depending on disease severity and environmental conditions. Use the higher rates
	3.95 lb. ²	7 days³	0.79 lb.¹	for severe disease.*

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³
Not for Use in California*

Amended August 7, 2007/ Page24 of 27

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MISCELLANEOUS (cont'd)

Plant	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions	
Guava	Anthracnose, Red Algae	25.6-38.4 oz.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.	
Litchi	Anthracnose 4.92 lb. ²	25.6-38.4 oz.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Use the higher rates for severe disease.*	
Macadamia	Anthracnose	38.4-64 oz.	150-250 ppm	Initiate sprays at first sign of flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.	
	Phytophthora Blight (<i>P. capsici</i>), Raceme Blight (<i>Botrytis cinerea</i>) 9.44 lb. ²	38.4-64 oz. 7 days³	150-250 ppm 2.36 lb. ¹	Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease.	
Mamey Sapote	Algal Leaf Spot	38.4-64 oz.	150-250 ppm	Apply when conditions favor disease development. Repeat on a 14 to 30 schedule or as needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease.*	

Maximum per Application Rate (lbs Cu²+/A)¹ Maximum Annual Rate (lbs Cu²+/A)² Minimum Retreatment Interval³ Not for Use in California*

Amended August 7, 2007/ Page25 of 27

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GREENHOUSE and SHADEHOUSE CROPS

Notice to Users: Magna-Bon Bahama Klear may be used in greenhouses and shade houses to control diseases on crops which appear on this label, and specific instructions have been developed for crops listed. The grower should bear in mind the sensitivity of crops grown in greenhouses and shadehouses differs greatly from crops grown under field conditions. Neither the manufacturer nor the seller has determined whether or not Magna-Bon Bahama Klear can be used safely on all green house and shadehouse grown crops. Consequently, injury arising from the use of Magna-Bon Bahama Klear on these types of greenhouse and shadehouse crops is the responsibility of the user. The user should determine if Magna-Bon Bahama Klear can be used safely prior to commercial use. In a small area, apply the recommended rates to the plants in question, i.e. foliage, fruit etc., and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use.

Apply Magna-Bon Bahama Klear according to specific rates given for those crops in ounces per acre. One fluid ounce = 29.5 milliliters = 6 teaspoons per 1,000 square feet is equivalent to 21.5 ounces per acre. Magna-Bon Bahama Klear should be applied in adequate water for thorough coverage of plant parts. Begin application at first sign of disease and repeat at 7 to 14 day intervals or as needed; use shorter spray intervals during periods when severe disease conditions persist.

NOTE: Phytotoxicity may occur on young tender flush when Magna-Bon Bahama Klear is applied to

citrus seedlings grown in greenhouses or shadehouses.

Crop	Disease	Rate	Instructions	
Citrus (Non-Bearing Nursery)	Brown Rot, Citrus Canker, Greasy Spot, Melanose, Pink Pitting, Scab	15 milliliters	Begin applications when disease first threatens. Repeat at 30 day intervals or as needed depending on disease severity.	
Cucumber	Downy Mildew		Apply weekly when plants begin to vine. Use the higher rates when conditions favor disease.	
Eggplant	ggplant Alternaria Blight, Anthracnose, Phomopsis		Begin applications prior to development of disease symptoms. Repeat at 7 to 10 day intervals or as needed depending on disease pressure.	
Pepper	Bacterial Spot	9-15 milliliters	Begin applications when conditions favor disease development and repeat at 5 to 10 day intervals or as needed depending on severity. Use the higher rates when conditions favor disease.	
Tomato	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	9-15 milliliters	Begin applications when disease first threatens and repeat at 5 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.	

Amended August 7, 2007/ Page26 of 27

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LIMITED WARRANTY AND LIMITATION OF REMEDIES

Seller warrants that the product conforms to the chemical description and is reasonably fit for the purpose stated on the label for use under normal conditions, but makes no other warranties of FITNESS or MERCHANTABILITY expressed or implied, or any other warranty if the product is used contrary to the label instructions or under abnormal conditions not foreseeable to the seller. In no case shall the seller be liable for more than the cost of the product to the buyer, and will in no event be liable for any consequential, special or indirect damages connected with the use or handling of this product. This product is offered and the buyer or user accepts it's subject to the foregoing terms which may not be varied.

Amended August 7, 2007/ Page27 of 27

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ADDITIONAL CONTAINER LABEL

CONTAINER RECYCLING and DISPOSAL INFORMATION

Non-refillable Containers: Do not reuse or refill this container. Offer for recycling, if available.

Lot #			

Non-refillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state.

For containers 5 gallons or less: Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times.

For containers of more than 5 gallons, i.e. drums: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand container on its end and tip back and forth several times. Turn the container over onto its other end and tip back and tip back and forth several times. Empty rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat procedure two more times.

For large containers, i.e., IBC's or "totes": Pressure washing may be an alternative. Pressure rinse as follows: Empty remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after flow begins to drip. Hold the container upside down over application equipment or a mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after flow begins to drip.

Rinsing and reuse of "totes" is permissible.

Amended August 7, 2007/ Page28 of 27

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Material to be added to an e-Jacket/Jacket

Reg. No. 666.75-3
1. Placement within the e-Jacket/jacket:
□ Default: (chronological, top/newest)
□ Description: (PDF page number, i.e., "before page 45")
2. Send to Data Extraction contractors this material:
□ Newly stamped accepted label
☑ Notification
□ New CSF
Other: Gold Seal Letter
3. Attach this coversheet to the top of the material or jacket. I must be well organized and clipped together, NOT STAPLED. Then give the material with this coversheet to staff in the Information Services Center (Room S-4900).
Reviewer's Name: M 5w; ndell
Phone: Division:
Date: 1/3/11



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

JAN - 3 2011

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

I, Marshall Swindell, Regulatory Management Branch I, Antimicrobials Division, Office of Pesticide Programs, Office of Prevention, Pesticides and Toxic Substances, United States Environmental Protection Agency ("EPA"), certify that the pesticide product listed below is, as of the date of this letter, a registered product under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, and that as such, the product may be sold and marketed in the United States of America as authorized and limited by FIFRA. A true and correct copy of the product label approved by EPA is attached to accompany this letter.

Registration of this product with EPA also denotes that the registrant listed below is responsible for ensuring full compliance with all the laws of the United States of America, or governing jurisdiction, regarding the sale, storage and/or disposal of the product(s). Further, the recipient of this letter is on notice that the referenced registration and/or the accompanying label may change subsequent to the date of this letter. EPA assumes no responsibility to notify the recipient of this letter of any change in the status of the registration(s) and/or the product label for the product(s) listed below.

EPA has issued a registration number for the product listed below to:

Magna-Bon Agricutural Control Solutions 1531 N.N. 25th Drive Okeechobee, FI 34972

EPA Registration Number: 66675-3

Name of Product:

Magna Bon Bahama Klear

A CALLED ST.

Marshall Swindell

Product Manager (33)

Regulatory Management Branch I Antimicrobials Division (7510P)

Material to be added to an e-Jacket/Jacket

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Date: 12/9/10

Created July 21/2001

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

DEC 0 9 2010

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, FL 34972

Attention: Susan Wright General Manager

Subject:

Amendment - Magna-Bon Bahama Klear - Add organic wording

EPA Reg. No. 66675-3

Amendment Letter Dated September 30, 2010

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is unacceptable. The proposed language, "For Organic Production," has been reviewed and found to be unacceptable.

The Agency does not permit NOP labeling of this product. If the registrant wishes to pursue an organic designation they must remove the nonagricultural and postharvest uses from their label or they must submit an application for a me-too, which does not bear any non-compliant uses. Please see enclosed table for further clarification.

If you have any questions concerning this letter, please contact Abigail Downs at (703) 305-5259.

Sincerely,

Marshall Swindell
Product Manager (33)

Product Manager (33)

Regulatory Management Branch I Antimicrobials Division (7510P)

Inert ingredient information may be entitled to confidential treatment

EPA National Organic Program Labeling Request Checklist

Reviewer Name: Chris Pfeifer RAL: Abby Downs

Product Name: Bahama Klear (EPA Reg. No.: 66675-3) Completion Date: 12/8/10

Determination: Not Permitted Receipt Date: 11/3/10

#	Check list Item	Yes	No
1	Active Ingredients - Are all of the active ingredient(s) "Allowed" on the National List?		N
2	Active Ingredients History - Is the active ingredient on the BPPD list of previous NOP approvals (f:/USER/SHARE/BPPD/Organic/Copy of NOP/allowableble.pdf or ALLOWED.xls)?	Y	
3	Inert Ingredients - Are all of the inert(s) found on the August 2004 EPA list 4A and 4B?		N
4	Inert Ingredients - Have any inert(s) been recently revoked (Revoked List 4 Inerts)?		N
5	Use Sites – Are all the product's use sites within the scope of the designated use patterns cited in the <i>National List</i> ?		N
6	Language - Is the requested label language allowable. (Acceptable language includes: "For Use in Organic Production"; "For Organic Production"; "For Use in Organic Gardening"; "For Organic Gardening"; "OMRI Listed"; the OMRI logo; and the three leaf EPA NOP Logo.		N
7	OMRI Certification – Does the application have a current OMRI certificate?		N
	Comments - #1) Active Ingredient: While sulfur is approved for use in agricultural production, it is not approved for postharvest use per 7 CFR 205.605. #2) Inerts: The source of the was not provided. The inert ingredient is not allowed for NOP postharvest uses per 7 CFR 205.605. #3) Per PR Notice 2003-1, all use sites must be within the scope of the NOP in order for a claim of organic production to be made. Hot tubs, pools, spas and these postharvest applications are all beyond that scope, and are not allowed. #4) The NOP language - For Organic Production—is not acceptable because the composition of the formulation cannot be entirely confirmed at this time and because the label contains use sites, which do not comply with the NOP. #5) If the registrant wishes to pursue an organic designation they must remove the nonagricultural and postharvest uses from their label or they must submit an application for a me-too, which does not bear any non-compliant uses.		

This review contains CONFIDENTIAL BUSINESS INFORMATION (CBI). Do not release this document to the registrant if it contains confidential information on proprietary mixes.

Program Links - National Organic Program (<u>AMS - NOP</u>); PR Notice 2003-1 (<u>PR Notice 2003-1</u>)
BPPD Guidance Document - Other Items May be Required

CONFIDENTIAL BUSINESS INFORMATION



BAHAMA KLEAR[™] Algicide/Bactericide/Fungicide

FOR SWIMMING POOLS, OUTDOOR HOT TUBS AND SPAS AND FOR USE ON RAW AGRICULTURAL COMMODITIES

FOR ORGANIC PRODUCTION

Ingredients

Keep Out Of the Reach of Children DANGER

	FIRST AID
IF INHALED:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a Poison Control Center or Doctor for treatment advice.
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or Doctor for treatment advice.
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a Poison Control Center or Doctor for treatment advice.
IF SWALLOWED:	Call a Poison Control Center or Doctor immediately for treatment advice. Have a person sip a glass of water, if able to swallow. Do not induce vomiting unless told to do so by the Poison Control Center or Doctor. Do not give anything by mouth to an unconscious person.
Have the product co	ontainer or label with you when calling a poison control center or doctor, or going for treatment.

EPA REG. NO.	66675-3				
EPA EST. NO.	66675-FL-0	01			
LOT NO.					
Net Contents: 1	U.S. Gallon	(3.78 Liters)	- 9.9 lbs per U.S.	Gallon	(1.188 kg/l)

Manufactured by:

MAGNA-BON II, LLC 1531 NW 25th Drive Okeechobee, FL 34972 863-357-0400

For Emergency Assistance Call CHEMTREC 1-800-424-9300

Amended August 7, 2007/ Page 1 of 25

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^{*}Equivalent to 5.0% metallic copper A Chelated Copper Product

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³ In compliance with PR Notice 95-1, this effluent discharge statement will appear on containers that are equal to or greater than 50 lbs./5 gallons Per PR Notice 95-1, this language is not required for containers less than 50 pounds/5 gallons.

STORAGE AND DISPOSAL

Prohibition: Do not contaminate water, food or feed by storage or disposal.

Storage: Store in a safe place away from PETS AND KEEP OUT OF THE REACH OF CHILDREN. Store away from excessive heat. Magna-Bon Bahama Klear will freeze. Always keep container closed. Store Magna-Bon Bahama Klear in its original container only. [Bulk Magna-Bon Bahama Klear shall be stored and handled in 316L stainless steel, fiberglass, PVC's, polypropylenes or plastic equipment.] ¹ Keep away from galvanized pipe and any nylon storage handling equipment.

Pesticide Disposal: Excess Magna-Bon Bahama Klear should be disposed of through label use. Do not contaminate lakes, rivers or streams as this may cause fish kill. [Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.] ² In the event of a spill, neutralize with limestone or baking soda before disposal. Concentrate may deteriorate concrete.

Container Disposal: Do not reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved State and local procedures. [Rinsing and reuse of "totes" is permissible.] ¹

PRECAUTIONARY STATEMENTS Hazards To Humans And Domestic Animals

DANGER. Corrosive: Causes irreversible eye damage and skin irritation. Do not get into eyes or on clothing. Wear goggles or safety glasses. Harmful if swallowed, inhaled or absorbed through the skin. May cause allergic skin response. Avoid contact with skin. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. [Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.] ³

For Terrestrial Uses: This pesticide is toxic to fish and aquatic organisms. Do not apply directly to water or areas where surface water is present or to intertidal areas below the mean high mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

GENERAL INFORMATION

Magna-Bon Bahama Klear is a copper sulfate pentahydrate formulation used to control bacteria and algae in swimming pools and outdoor hot tubs and spas. It is used as a post harvest wash to control bacteria and fungi that cause spoilage in fruits and vegetables and is used on growing agricultural commodities to control bacteria and fungi.

Using water containing moderate to high amounts of sulfur may cause Magna-Bon Bahama Klear to neutralize. Whenever possible, use a compatibility jar test before mixing a whole tank.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

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Application:

For control of algae and odor causing bacteria in swimming pools, outdoor hot tubs and spas, add Magna-Bon Bahama Klear as per chart below.

	Water	Magna-Bon Bahama Klear
Swimming	15,000 Gal	1 – 3 Quarts
Pools:	30,000 Gal	2 - 6 Quarts
	60,000 Gal	4 -12 Quarts
Outdoor	235 Gal	1 Ounces
Hot Tubs	470 Gal	2 Ounces
and Spas:	700 Gal	3 Ounces

Application should be made before visible algae appear. Where visible algae is present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive build up of metallic copper. Magna-Bon Bahama Klear may be used at the higher rates to help control odors and algae during the winter months while the pool is not being used. Recommended application rates yield (1 ppm to 3 ppm) metallic copper.

[To control algae and bacteria in swimming pools, spas & hot tubs: Apply at the rate of 2 - 4 quarts of Magna-Bon Bahama Klear per 60,000 gallons. This will provide a level of 0.5 ppm to 1.0 ppm metallic copper. Application should be made before visible algae appear. Where visible algae are present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive buildup of metallic copper. Magna-Bon Bahama Klear may be used to help control pool odors and algae during winter months. Maintain the higher rate while the pool is not being used during the winter. Do not discharge treated pool effluent where it will drain into lakes, streams, ponds, or public water.] ⁴

General Algae/Bacteria Control:

For suppression of bacterial odors and for control of algae, apply in late spring or early summer when algae and bacteria first appear. The dosages are variable and depend upon algae/bacteria species, water hardness, water temperature, amount of algae/bacteria present, as well as whether water is clear, turbid, flowing or static. Preferably, the water should be clear with the temperature above 60 °F or 15.6 °C. Higher dosages are required at lower temperatures, higher algae/bacteria concentration, and for hard waters. Application should be done by pouring Magna-Bon Bahama Klear directly from the container into the pool, outdoor hot tub or spa. Several application points speed up dispersal. Static water requires less chemical for algae/bacteria control than does flowing water. Use higher dosages for Chara, Nitella and filamentous algae (pond scum), and lower dosages for planktonic algae. If there is uncertainty about the dosage, begin with a lower dose and increase until control is achieved, or until the maximum allowable level has been reached.

Amended August 7, 2007/ Page3 of 25

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For Use as a Post Harvest Wash an Agricultural Commodities: To use as an algicide, bactericide, fungicide post harvest wash the following directions apply.

For use as a post harvest wash, this product may be applied with any type of application equipment that gives thorough and uniform coverage. Devices may include, but are not limited to, dunk and dip tanks, spray applicators or fogging.

Washing raw agricultural commodities will both clean and control bacteria and fungi that cause spoilage. Depending on water quality and cleaning conditions, or when adding new processing water, add from one hundred three (103) up to one hundred twenty eight (128) fluid ounces of Magna-Bon Bahama Klear per one thousand (1,000) gallons of water. Allow thorough coverage of the commodity and then let dry. Rinsing is not required or recommended.

Depending on water quality, cleaning conditions or when adding new processing water, start at lower rinse rates. Add Bahama Klear as per the chart below.

BAHAMA KLEAR

RINSE WATER

25.6 ounces to 32 ounces	250	gallons
51.2 ounces to 64 ounces	500	gallons
103 ounces to 128 ounces	1,000	gallons

Remember: Commodities need only be immersed long enough to allow complete coverage.

FOR USE AS A FUNGICIDE/BACTERICIDE ON GROWING AGRICULTURAL COMMODITIES: For use as a systemic fungicide/bactericide on growing agricultural commodities, the following directions apply. For Organic Production: Bahama Klear must be used in a manner that minimizes accumulation of copper in the soil.

GENERAL INSTRUCTIONS

Bahama Klear may be applied with any type of application equipment that gives uniform coverage of all foliage, including ground, aerial and low volume sprayers as specified on this label. Equipment used for application should be PVC or 316L stainless steel. Bahama Klear is compatible with most fungal and insecticidal biopesticides when applied at least two (2) days before or after application of the biopesticide. Phytotoxicity – Although Bahama Klear has been tested on a wide variety of fruits, vegetables and nuts without phytotoxicity, there could be some varieties and cultivars that because of environmental factors and stages of growth could possibly foster systems. The per acre use rate of Bahama Klear is applicable for dilute spraying. Depending on the equipment used and the specific crop, the spray volume applied per acre will differ. Refer to the Minimum Recommended Spray Volume Table. Complete spray coverage is essential to assure optimum performance from Bahama Klear. When treating by aerial application or with low volume application equipment, unless you have had specific previous experience, it is advisable to test for compatibility and tolerance to crop injury prior to full scale commercial utilization.

Consult Bahama Klear label for specific rates and timing of application by crop. Where application rates and intervals are provided in a range (e.g., 2-4 fluid ounces and 7 to 10 days) the higher rates and shorter spray time intervals are recommended when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops. The use of a surfactant, such as Cell-U-WettTM is acceptable for plants having waxy or hairy surfaces. Bahama Klear works via surface contact with the plants and materials being treated. It is important to ensure that all surfaces are thoroughly wetted. Bahama Klear does not produce any visible residue or have a distinct odor. It does have a residual, especially if applied with a surfactant.

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SPECIAL PRECAUTIONS

- Do not mix with acidic compounds such as Alliette™ within 14 days before or after application of same.
- This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.
- Environmental conditions such as extended periods of wet weather, acid rain, etc., which alter the pH of the leaf surface may effect the performance of Bahama Klear resulting in possible phytotoxicity or loss of effectiveness.
- . Do not mix with pot ash.
- It must be determined in the selection process if proper application equipment is available and if
 the waste associated with its use can be properly handled. Materials used on the construction of
 application equipment is also an important factor as agricultural chemicals are often reactive with
 soft metals such as aluminum and even some synthetic materials such as plastics, rubbers, etc..
 Therefore it is necessary when working with equipment containing these materials, that they are
 thoroughly flushed with clean water after each days use.

Personal Protective Equipment

Personal Protective Equipment: Some materials that are chemical-resistant to this product are listed below. Applicators and other handlers must wear:

- Long sleeved shirt
- Long pants
- Chemical resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride or viton
- Protective eyewear
- Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Workers Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, water, is: coveralls, protective eyewear, chemical resistant gloves, and shoes plus socks.

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- 4 This is alternate Directions for Use language.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Workers Protection Standard for agricultural pesticides, 40 CFR part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Do not allow re-entry into treated areas until sprays have dried.

GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: Sprinkler including center pivot, lateral move, end row, side (wheel) roll, traveler, big gun, solid set or hand move: flood (basin); furrow; border or drip (trickle) irrigation and system(s). Do not apply this product through any other type of irrigation systems.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety device for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Posting areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds or other public facilities not including public roads, or 2) when chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters of at least 2 ½ inches tall, and all letters and the symbol shall be in a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

This sign is in addition to any sign posted to comply with the Workers Protection Standard.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be

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CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER Cont'd.

discharged into a reservoir tank prior to pesticide introduction. There shall be a complete break (air gap) between the flow outlet end of the fill pipe and the top of the overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of liquid back toward the injection.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable

of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

When mixing, agitation is not necessary. Adjust the pH of the water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add Bahama Klear last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures.

Bahama Klear may be added through a traveling system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

SPRINKLER CHEMIGATION

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement pump (i.e., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

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SPRINKLER CHEMIGATION Cont'd.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the Bahama Klear last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures.

May be added through a traveling irrigation system or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

FLOOR (BASIN), FURROW AND BORDER CHEMIGATION

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination back flow.
- b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of liquid back toward the injection pump.
- c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- f. Systems must use a metering pump, such as a positive displacement pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the Bahama Klear last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the labels of all products used on the mixtures.

Bahama Klear may be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

DRIP (TRICKLE) CHEMIGATION

The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of liquid back toward the injection pump.

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DRIP (TRICKLE) CHEMIGATION Cont'd.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor pump stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump such as a positive displacement injection pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc, add the Bahama Klear last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures. Bahama Klear may be added through a traveling irrigation system continuously or at the last 30 of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

FOR SPRAY AND SOIL DRENCH APPLICATIONS

Always spray for total foliage coverage. When re-spraying the rates and severity of the disease vary with unforeseen conditions. However, in the event of severe disease, spraying intervals can be shortened to 3 to 5 days. At times, lower rates can be as effective as higher rates and should be tried first. Usually, preventive programs may be maintained at lower rates. Use of low volume spraying is effective against Botrytis and not effective against established powdery mildew and Xanthomonas infections. Also, applications on actively growing tissue may be more effective than applications on dormant tissue.

MINIMUM RECOMMENDED SPRAY VOLUME (GALLONS) PER ACRE WHEN APPLYING BAHAMA KLEAR

		GROUND			
CROP	AERIAL	DILUTE	CONCENTRATE*		
Vegetables	3	20	30		
Field Crops	3	20	30		
Small Fruits	5	150	30		
Vines	5	150	30		
Tree Crops	10	400	50		
Citrus	10	125	30		

*Pesticide application equipment such as Curtec® or other similar sprayers which are capable of obtaining coverage at low volumes may be used at as low as 20 gpa of spray volume.

The following specific instructions are based on general application procedures. The recommendations of the State Extension Service should be closely followed as to timing, frequency and numbers of sprays per season.

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FROST INJURY PROTECTION BACTERIAL ICE NUCLEATION INHIBITOR

Application of Bahama Klear made to all crops listed on this label at rates and stages of growth indicated on this label, at least 24 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria (<u>Pseudomonas syringae</u>, <u>Erwinia herbicola and Pseudomonas flourescens</u>) and may therefore provide some protection against light frost. Not recommended for those geographical areas where weather conditions favor severe frost.

The chart below is used to calculate correct ppm's* of active ingredient (A.I.) per volume of carrier water. These volumes can be used for either conventional or concentrated sprays.

AMOUNT OF BAHAMA KLEAR PER VOLUME OF WATER FOR PROPER PPM'S* OF APPLIED ACTIVE INGREDIENT (AS COPPER)

ppm's* of A.I.	30 gallons per acre	50 gallons per Acre	100 gallons per Acre	125 gallons per Acre	250 gallons per Acre	500 gallons per Acre
50	3.85 oz.	6.4 oz.	12.8 oz.	16 oz.	32 oz.	64 oz.
75	5.78 oz.	9.6 oz.	19.2 oz.	24 oz.	48 oz.	96 oz.
100	7.70 oz.	12.8 oz.	25.6 oz.	32. oz.	64 oz.	1 gal.
125	9.6 oz.	16 oz.	32 oz.	40 oz.	80 oz.	1.25 gal.
150	11.5 oz.	19.2 oz.	38.4 oz.	48 oz.	96 oz.	1.5 gal.
200	15.4 oz.	25.6 oz.	51.2 oz.	64 oz.	1 gal.	2 gal.
250	19.2 oz.	32 oz.	64 oz.	80 oz.	1.25 gal.	2.5 gal.

^{*} ppm = parts per million (as copper)

CITRUS

Grapefruit, Kumquat, Lemon, Lime, Orange, Tangelo, Tangerine

Disease	Rate per Acre	ppm's (copper) per 100 gallons of water	Instructions
Brown Rot	30-70 oz.	120-275 ppm	Apply at first indication of rain or first appearance of Brown Rot. Re-apply as needed during wet weather.
Greasy Spot, Pink Pitting	25.6-64 oz.	100-250 ppm	Apply during mid-summer.
Scab	25.6-64 oz.	100-250 ppm	Apply shortly before trees begin to flush. Re-apply at 2/3 petal fall. Re-apply 4 weeks later, if necessary.
Melanose	25.6-64 oz.	100-250 ppm	Apply 2 times per year before the onset of spring and autumn rains.
Canker (Suppression)	12.8-64 oz.	50-250 ppm ** 12.6 lb.	Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require additional applications. Number and timing of applications will be dependent on disease pressure. Under heavy pressure, each new flush of growth should be sprayed. Heavily infected trees should be sprayed with a minimum dosage of 250 ppm with a follow up spray after 7-14 days at 200 ppm.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu²+/ A)²

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FIELD CROPS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of	Instructions
Alfalfa	Cercospora Leaf Spot, Leptosphaerulina Leaf Spot	19.2-32 oz.	water 75-125 ppm	Apply 10 to 14 days before each harvest or earlier if disease threatens. NOTE: Spray injury may occur with sensitive varieties such as Lahontan.
Corn (Field Corn, Popcorn, Sweet corn)	Bacterial Stalk Rot	19.2-32 oz.	75-125 ppm	Begin treatment when disease first appears and repeat every 7 to 10 days or as needed. Use the higher rates and shorter spray intervals when conditions favor disease.
Peanut	Cercospora leaf Spot	19.2-25.6 oz.	75-100 ppm	Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14 day intervals or as needed. Reduce sprays to 7 day intervals during humid weather. Use the higher rates when conditions favor disease.
Potato	Early Blight, Late Blight	19.2-32 oz.	75-125 ppm	Apply 75 to 125 ppm at 7 to 10 day intervals or as needed starting when plants are 2 to 6 inches high in locations where disease is light. Add up to 32 oz. per acre when disease is more severe.
Sugar Beets	Cercospora Leaf Spot	19.2-38.4 oz.	75-150 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use higher rates when conditions favor disease. Addition of a sticker/spreader is recommended.
Wheat, Barley, Oats	Helminthosporium Spot Blotch, Septoria Leaf Blotch	19.2-25.6 oz.	75-100 ppm	Make First application at early heading and follow with second spray 10 days later. Use the higher rates when conditions favor disease.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu2+/A)2

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SMALL FRUITS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Blackberry (Aurora, Boysen, Cascade, Chehalem,	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dormant spray after pruning/training in the spring. If needed, agricultural-type spray oil may be added.
Logan, Marion, Santiam, Thornless Evergreen)	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	** 10.0 lb.	75 ppm	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
Blueberry	Bacterial Canker	32-51.2 oz.	125-200 ppm	Make application before fall rains and a second application 4 weeks later. Use the higher rates when conditions favor disease.
	Fruit Rot, Phomopsis Twig Blight	25.6-51.2 oz.	100-200 ppm	Dormant Application: Begin applications when bloom buds begin to swell. Make additional applications at 10 to 14 day intervals or as needed before blooms open.
Cranberry	Fruit Rot	51.2 oz.	200 ppm	Make application in late bloom. Apply one or two additional applications at 10 to 14 day intervals or as needed depending on disease severity.
	Rose Bloom	51.2 oz.	200 ppm	Apply three sprays on 10 to 14 day schedule or as needed as soon as symptoms are observed.
	Bacterial Stem Canker	51.2 oz.	200 ppm	Apply post harvest and again in spring at bud swell. Apply one or two additional applications at 10 to 14 intervals or as needed depending on disease severity.
	Leaf Blight, Red Leaf Spot, Stem Blight, Tip Blight (<i>Monilinia</i>)	51.2 oz. ** 6.3 lb.	200 ppm	Apply delayed dormant spray in the spring. Repeat at 10 to 14 day intervals or as needed through pre-bloom.

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SMALL FRUITS (cont'd)

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Currant, Gooseberry	Anthracnose, Leaf Spot	64 oz.	250 ppm	Make Initial application after first leaves have expanded. Continue on a 10 to 14 day schedule or as needed during wet conditions in the spring. Make an additional application after harvest.
Raspberry	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dormant spray after training in the spring. If needed, agricultural-type spray oil may be added.
	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	** 10.0 lb.	75 ppm	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
Strawberry	Angular Leaf Spot (Xanthomonas), Leaf Blight, Leaf Scorch, Leaf Spot	19.2 25.6 oz. ** 8.19 lb.	75-100 ppm	Begin application when plants are established and continue on a weekly schedule throughout the season. Apply in at least 20 gallons of water. Use the higher rates when conditions favor disease. NOTE: Discontinue applications if signs of crop injury appear.

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Amended August 7, 2007/ Page 13 of 25

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TREE CROPS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Almond, Apricot, Cherry, Plum Prune	Bacterial Blast (Pseudomonas), Bacterial Canker, Coryneum Blight (Shot Hole)	51.2-64 oz.	200-250 ppm	Make first application before fall rains and a second at late dormant. Use the higher rates when conditions favor disease. If needed, agricultural-type spray oil may be added. For Cherries: Where disease is severe, an additional application shortly after harvest may be required. NOTE: Foliar injury may occur from post-bloom sprays on almonds, especially on NePlus varieties.
	Blossom Brown Rot, Coryneum Blight (Shot Hole)	51.2-64 oz. on almond, All others 60-90 oz.	200-250 ppm	Apply during early bloom. Do not apply after full bloom or injury may occur. Use the higher rates when rainfall is heavy and disease pressure is high.
	Black Knot* (Plum)	32-64 oz.	125-250 ppm	Make application at bud swell up to early bloom for early disease suppression. Apply before full bloom. Use the higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury, do not use after full bloom.
	Cherry Leaf Spot* (Sour Cherries Only)	38.4-64 oz.	150-250 ppm	Apply at petal fall as well as 1 to 2 times after petal fall. Use the lower rates where disease infection is light and use the higher rates for a dormant application or where disease infection is moderate to heavy. Do not apply to sweet cherry or the English Morello variety as severe injury will result. NOTE: Moderate to severe injury such as leaf spotting and defoliation may occur
	** Movimum Annual Loo	** 18.0 lb		from post bloom applications.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu2+/A)2

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Apple	Anthracnose, Blossom Blast, European Canker (Necria), Shoot Blast (Pseudomonas)	51.2-64 oz.	200-250 ppm	Apply before fall rains. Use the higher rates when conditions favor disease. NOTE: Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.
	Apple Scab, Fire Blight	High 51.2-64 oz.	200-250 ppm	Make application between silver- tip and green-tip. Apply as a full cover spray for early season disease suppression. NOTE: Moderate to severe crop injury may occur from late application; discontinue use when green-tip reaches ½ inch.
	Apple Scab	Low 19.2-25.6 oz.	75-125 ppm	Extended spray schedule where fruit finish is not a concern:
	Fire Blight	Low 19.2-25.6 oz.	75-100 ppm	Continued applications may be made at 5 to 7 day intervals or as needed between ½ inch green-tip and first cover spray. NOTE: Moderate to severe crop injury may result from this extended spray schedule. It is not intended for fresh market apples or for apples where fruit finish is a concern as it is likely to cause fruit russetting.
	Collar Rot, Crown Rot	32 oz.	125 ppm	Mix 100 gallons of water. Apply 4 gallons of solution as a drench on the lower trunk area of each tree. Apply in early spring or in fall after harvest for beast results. Do not apply to foliage or fruit.
Avocado	Anthracnose, Blotch, Scab	51.2-64 oz. ** 18.9 lb.	200-250 ppm	Apply when bloom buds begin to swell and continue application at monthly intervals for five to six applications. Use the higher rates when conditions favor disease.

^{**} Maximum Annual Load of Copper per growing season (Ib

(lb Cu2+/ A)2

Amended August 7, 2007/ Page 15 of 25

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Banana	Sigatoka (Black and Yellow)	19.2 oz.	75 ppm	Apply by air in 3 gallons of water. If needed, agricultural-type spray oil may be added. Apply on a 14 day schedule or as needed throughout the wet season. Apply at 21 day intervals or as needed during dry periods.
	Black Pitting	32 oz.	125 ppm	Mix 100 gallons of water. Apply to the fruit stem and the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.
Cacao	Black Pod	19.2-64 oz. ** 15.75 lb.	75-250 ppm	Begin applications at the start of the rainy season and continue while infection conditions persist.
Coffee	Coffee Berry Disease (Collectotrichum coffeanum)	38.4-64 oz.	150-250 ppm	Apply first spray after flowering and before onset of long rains and then at 21 to 28 day intervals or as needed until picking. Use the higher rates when conditions favo disease.
	Bacterial Blight (Pseudomonas syringae)	38.4-64 oz.	150-250 ppm	Begin spray program before the onset of long rainy periods and continue throughout the rainy season at 14 to 21 day intervals of as needed. The critical time for spraying to control disease is just before, during and after flowering(s), especially when coinciding with wet weather. Use the higher rates when rainfall is heavy and disease pressure is high.
	Leaf Rust (Hemileia vastatrix)	19.2-32 oz.	75 ppm	Apply before the onset of rain and then at 21 day intervals or as needed while the rains continue. Use the higher rates when rainfall is heavy and disease pressure is high.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu²+/ A)²

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Coffee	Iron Spot (Cercospora coffeicola), Pink Disease (Corticium salmonicolor)	19.2 oz. ** 12.6 lb.	75 ppm	Use concentrate or dilute spray. Begin treatment at the start of wet season and continue at monthly intervals for three applications
Filbert	Bacterial Blight	64-128 oz.	250-500 ppm	Apply as a post harvest spray. In seasons of heavy rainfall, apply a second spray when three fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added.
	Eastern Filbert Blight	64-128 oz.	250-500 ppm	Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 2 week intervals or as needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added.
Mango	Anthracnose	38.4-64 oz. ** 18.2 lb.	150-250 ppm	Apply monthly after fruit set until harvest. Use the higher rates when rainfall is heavy and disease pressure is high.
Olive	Olive Knot, Peacock Spot	64-76.8 oz.	250-300 ppm	Make first application before winter rains begin. A second application in early spring should be made if disease is severe. Apply the higher rates for heavy disease pressure or when conditions favor disease development.
Peach, Nectarine	Bacterial Blast (Pseudomonas), Bacterial Canker, Bacterial Spot (Xanthomonas), Coryneum Blight (Shot Hole), Leaf Curl	51.2-76.8 oz ** 18.0 lb.	200-300 ppm	Make first application before fall rains and a second at late dormant. For peach leaf curl, late dormant application must be made before leaf buds swell. Use the higher rates when rainfall and disease pressure is high. If needed, agricultural-type spray oil may be added.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu²+/ A)²

Amended August 7, 2007/ Page 17 of 25

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Peach, Nectarine	Blossom Brown Rot, Coryneum Blight (Shot Hole), Leaf Curl	51.2-76.8 oz.	200-300 ppm	Full cover spray at pink bud. Use the higher rates when conditions favor disease.
	Bacterial Spot	19.2 oz. ** 18.0 lb.	75 ppm	Post-bloom application applied at first and second cover sprays. NOTE: do not spray 3 weeks prior to harvest. Use only recommended rates. Spotting of leaves and defoliation may occur from use in cover sprays.
Pear	Fire Blight	19.2 oz.	75 ppm	Apply 5 day intervals or as needed throughout the bloom period. NOTE: Russetting may occur in copper sensitive varieties. Excessive dosages may cause fruit russet on any variety.
	Blossom Blast (Pseudomonas)	51.2-76.8 oz.	200-300 ppm	Apply before fall rains and again during dormancy before spring growth starts. Use the higher rates when disease pressure is high or when conditions favor disease development.
Pecan	Kernel Rot, Shuck Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella pyramidalis)	19.2-32 oz.	75-125 ppm	For suppression, apply in sufficient water to ensure complete spray coverage at 2 to 4 week intervals or as needed, starting at kernel growth and continue until shucks open. Use the higher rates and shorter spray intervals if frequent rainfall occurs.
	Ball Moss, Spanish Moss	38.4-64 oz.	150-250 ppm	Apply in 100 gallons of water in the spring when ball moss is actively growing, using 1 ½ gallons of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. The addition of a non-ionic surfactant will improve control. A second application may be required after 12 months.

^{**} Maximum Annual Load of copper applied per growing season

(lb Cu2+/ A)2

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Pistachio	Botryosphaeria Panicle and Shoot Blight, Botytris Blight, Late Blight (<i>Alternaria</i> alternata), Septoria Leaf Blight	32-64 oz. ** 8.4 lb.	125-250 ppm	Make initial application at bud swell and repeat on a 14 to 28 day schedule or as needed. If disease conditions are severe, use the higher rates and shorter spray intervals.
Quince	Fire Blight	19.2 oz.	75 ppm	Apply at 5 day intervals or as needed throughout the bloom period. Apply in adequate water for thorough coverage.
Walnut	Walnut Blight	38.4-64 oz.	150-250 ppm	Apply at first spray at early pre-bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage or as needed when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves and nutlets is essential for effective control. NOTE: Adequate control may not be obtained when copper tolerant species of <i>Xanthomonas</i> bacteria are
		** 25.2 lb		present.

VEGETABLES

VEGETABLEG						
Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions		
Bean (Dry, Green)	Brown Spot, Common Blight, Halo Blight	19.2-25.6 oz.	75-100 ppm	For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14 day schedule or as needed depending on environmental conditions. Use the higher rates for more severe disease.		
Beet (Table Beet, Beet Greens)	Cercospora Leaf Spot	19.2-32 oz.	75-125 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use the higher rates when conditions favor disease.		
Carrot	Alternaria Leaf Spot, Cercospora Leaf Spot	19.2 oz.	75 ppm	Begin applications when disease first threatens and repeat at 7 to 14 day intervals or as needed depending on disease severity.		

^{**} Maximum Annual Load of copper applied per growing season (lb Cu2+/A)2

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VEGETABLES (cont'd)

Crop	Disease	Rate /Acre	ppm's (copper) per 100 gallons of water	Instructions
Celery, Celeriac	Bacterial Blight, Cercospora Early Blight, Septoria Late Blight	19.2 oz.	75 ppm	Begin applications as soon as plants are first established in the field, repeating at 5 to 7 day intervals or as needed depending on disease severity and environmental conditions.
Crucifers (Broccoli, Brussel Sprout, Cabbage, Cauliflower, Collard Greens, Mustard Greens, Turnip Greens)	Black Leaf Spot (Alternia), Black Rot (Xanthomonas), Downy Mildew	19.2-25.6 oz.	75-100 ppm	Begin application after transplants are set in the field, or shortly after emergence of field seeded crops or when conditions favor disease development. Apply at 7 to 10 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage.
Cucurbits (Cantaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon)	Alternia Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Powdery Mildew, Watermelon Bacterial Fruit Blotch (suppression)	19.2-25.6 oz.	75-100 ppm	Begin applications prior to disease development and continue while conditions are favorable for disease development. Repeat at 5 to 7 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	19.2 oz.	75 ppm	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals or as needed depending on disease severity.
Okra	Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spot, Powdery Mildew	19.2-32 oz.	75 ppm	Begin treatment when disease first threatens and repeat every 5 to 10 days or as needed depending on disease severity. Use the higher rates and shorter spray intervals when conditions favor disease.

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VEGETABLES (cont'd)

Crop	Disease	Rate /Acre	ppm's (copper) per 100 gallons of water	Instructions
Onion, Garlic	Bacterial Blight, Downy Mildew, Purple Blotch	19.2 oz. ** 6.0 lb.	75 ppm	Begin when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals or as needed depending on disease severity. Can cause phytotoxicity to leaves.
Pea	Powdery Mildew	19.2-25.6 oz. ** 3.95 lb.	75-100 ppm	Begin applications when disease symptoms first appear and repeat weekly intervals or as needed. Use the higher rates when conditions favor disease.
Pepper	Anthracnose, Bacterial Spot, Cercospora Leaf Spot	19.2- 25.6 oz.	75-100 ppm	Begin applications when conditions first favor disease development and repeat at 7 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.
Spinach	Anthracnose, Blue Mold, Cercospora Leaf Spot, White Rust	19-25.6 oz.	75-100 ppm	Begin application when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Flecking may occur on spinach leaves.
Tomato	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	19.2-32 oz. ** 17.4 lb.	75-125 ppm	Begin applications when disease first threatens and repeat at 5 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.
Watercress	Cercospora, Leaf Spot	19.2 oz. ** 2.12 lb.	75 ppm	Begin applications when plants are first established in the field, repeating at 7 to 14 day intervals or as needed depending on disease severity. Do not exceed four applications per crop. Apply using ground spray equipment at no less than 50 gallons of spray solution per acre.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu²+/ A)²

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VINES

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Grape	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	19.2-32 oz.	75-125 ppm	Begin applications at bud break with subsequent applications throughout the season depending on disease severity. Use the higher rates when conditions favor disease. NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara and Rosette.
Hops	Downy Mildew	19.2 oz.	75 ppm	Make crown treatments after pruning, but before training. After Training, additional treatments are needed at about 10 day intervals. NOTE: Discontinue use two weeks before harvest.
Kiwi	Erwinia herbicola, Pseudomonas flourescens, Pseudomonas syrinsae	38.4 oz.	150 ppm	Apply in 200 gallons of water per acre. Make applications on a monthly basis. A maximum of three applications may be made.

MISCELLANEOUS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Atemoya	Anthracnose	25.6-38.4 oz.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Carambola	Anthracnose	38.4-51.2 oz.	150-200 ppm	Make initial application before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Chives	Downy Mildew	19.2 oz. ** 2.65 lb.	75 ppm	Begin application when plants are established in the field. Repeat every 7 to 10 days or as needed depending on disease conditions.
Dill	Phoma Leaf Spot, Rhizoctonia Foliage Blight	19.2-25.6 oz. ** 3.95lb.	75-100 ppm	Begin applications when plants are first established in the field and repeat at 7-10 day intervals or as needed depending on disease severity and environmental conditions. Use the higher rates for severe disease.

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MISCELLANEOUS (cont'd)

Plant	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions			
Guava	Anthracnose, Red Algae	25.6-38.4 oz.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.			
Litchi	Anthracnose	25.6-38.4 oz. ** 4.92 lb.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Use the higher rates for severe disease.			
Macadamia	Anthracnose	38.4-64 oz.	150-250 ppm	Initiate sprays at first sign of flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.			
	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea)	38.4-64 oz.	150-250 ppm	Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease.			
Mamey Sapote	Algal Leaf Spot	38.4-64 oz.	150-250 ppm	Apply when conditions favor disease development. Repeat on a 14 to 30 schedule or as needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease.			

^{**} Maximum Annual Load of copper applied per growing season (lb Cu²+/ A)²

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¹ The language in parenthesis is only required on bulk containers, not on retail containers. .

² This language is only required to appear on the bulk and non-household-use containers, not on household-use containers. It will not appear on household-use containers

³ In compliance with PR Notice 95-1, this effluent discharge statement will appear on containers that are equal to or greater than 50 lbs./5 gallons Per PR Notice 95-1, this language is not required for containers less than 50 pounds/5 gallons.

⁴ This is alternate Directions for Use language.

LIMITED WARRANTY AND LIMITATION OF REMEDIES

Seller warrants that the product conforms to the chemical description and is reasonably fit for the purpose stated on the label for use under normal conditions, but makes no other warranties of FITNESS or MERCHANTABILITY expressed or implied, or any other warranty if the product is used contrary to the label instructions or under abnormal conditions not foreseeable to the seller. In no case shall the seller be liable for more than the cost of the product to the buyer, and will in no event be liable for any consequential, special or indirect damages connected with the use or handling of this product. This product is offered and the buyer or user accepts it's subject to the foregoing terms which may not be varied.

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⁴ This is alternate Directions for Use language.

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Canker Control Trials in Florida for Grapefruit and Hamlin Orange, 2008

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Introduction

Control of citrus canker in Brazil and Argentina is based on an IPM approach that foremost relies on planting of resistant varieties. In Florida, the fresh fruit and processing industries are heavily based on highly susceptible grapefruit and moderately susceptible Hamlin orange, respectively, which makes it necessary to rely more on other IPM measures. In South America this includes the use of windbreaks and bactericidal copper sprays to suppress the bacterium and prevent spread to non-infested areas. Kocide 2000 at rates as low as 0.5 lb metallic copper per acre is effective for reducing fruit disease and premature drop on moderately susceptible orange varieties in Brazil. Testing of copper formulations and rates in Florida is crucial to determine the efficacy of copper programs for control of the disease on grapefruit to qualify them for movement to the packinghouse for shipment as asymptomatic fruit or to reduce premature fruit drop of early oranges to minimize yield losses. In the case of fresh grapefruit this means that canker disease levels on fruit should not exceed 5% in the grove and should be reduced by pre-selection to 1% or less when entering the final packing process. Major questions for grapefruit are 1) can this level of control on grapefruit be achieved without windbreaks, 2) how long through the season will it be necessary to spray to protect the fruit, For early oranges the questions are what rates and duration of sprays are effective to minimize the amount of copper applied per acre season to reduce costs. Higher rates and longer durations of copper sprays risk phytotoxicity to fresh fruit, induction of copper resistance in the pathogen, soil accumulation and environmental contamination by copper. The purpose of these trials on grapefruit and Hamlin orange is to complete the initial assessment of canker control for fresh grapefruit in an east coast grove and Hamlin orange in a south central grove.

Experimental approach:

Objective1: To define rates and formulations for effective control of canker on grapefruit and Hamlin orange,

Approach to the objective:

Grapefruit trial

Location: Ft. Peirce, St. Lucie County Citrus variety: 6- yr-old Red grapefruit

Tree spacing: 12 ft x 25 ft spacing; 145 trees per acre

Randomized complete block: 4 plots of 5 trees/plot (5 trees in a row, 20 trees per

treatment). Each plot is approx 0.137 acres.

Spray volume and application: One gallon of spray per tree applied with a handgun (to incipient run-off from foliage) @ 20 gal per treatment equivalent to 145 gal/acre

Spray interval: every 21 days from mid March to Early October

Spray dates: 3/7; 3/28; 4/18; 5/9; 5/30; 6/20; 7/11 (Firewall spray); 8/4 (Firewall spray);

8/26; 9/15; 10/6; 10/27 Disease evaluations:

Fruit drop: all fruit on the ground under the middle 3 trees in each plot was periodically collected and evaluated for cause of fruit drop and fruit diameter is measured to determine the size of the fruit when was infected and dropped.

Fruit disease: Prior to harvest incidence of fruit with canker lesions, the age of the lesions and severity of lesions was assessed on 100 fruit collected from the middle 3 trees in each plot. Lesions are classified as "old" if they are larger than 0.25 inches in diameter, coalescing with surrounding lesions, black in color, exuding gum or have a prominent yellow halo; and "young" if lesions are smaller than 0.25 inches in diameter, brown in color, and not coalescing with surrounding lesions. Copper phytotoxicity, citrus scab (Elsinoe fawcetti) and melanose (Diaporthe citri) lesions on the fruit will be noted if present.

Table 1: Formulations, rates and manufacturers of products tested in the grapefruit trials

Treatment	Manufactuer /supplier	Metallic Cu (%) or a.i.(%)	Rate (lbs/acre)	Metallic Cu/acre
Kocide 2000	Dupont	35	2.0	0.66
Kocide 3000	Dupont	30	2.0	0.60
Kocide 3000	Dupont	30	1.0	0.30
Cuprofix Ultra 40	United Phosphorus	40	1.5	0.60
Kocide 3000 -	Dupont/	30/	2.0/	The Republican
Firewall(2x)- Kocide	Agrosource	22.4	1.5	0.60
Kocide 3000 -	Dupont/	30/	2.0/	Pile Page
Firewall(2x)- Kocide	Agrosource	22.4	1.5	0.60
plus 435 spray oil			5 gal/acre	- 0
Kocide - Firewall +	Dupont/	30/	2.00	0.60
Kocide (2x) - Kocide	Agrosource	22.4	1.5/1.00	0.30
Kocide 3000	Dupont	30	2.0	0.60
+PDS*			0.05gal/ac	
Champ DP	Nufarm	37.5	1.6	0.60
Kentan DF	Isagro	40	1.5	0.60
Badge SC	Isagro	20	2.11 pt/ac	0.60
IRF070	Isagro	28	2.14	0.60
Untreated check	-			

^{*}PDS = Polymer delivery system (Smart Anti-microbial Solutions, LLC)

Table 2: Rainfall at Ft. Pierce 2008

Monthly rainfall (inches)	Mar.	April	May	June	July	Aug.	Sept.	Oct. Nov.
Ft. Pierce 2008	2.58	0.03	3.48	8.61	12.24	16.87	4.59	4.77 1.15
Ft. Pierce ^z average	2.54	1.89	2.82	6.45	5.22	6.27	7.09	4.59 2.52

² Average monthly rainfall from 1998-2007 obtained from the Florida Automated Weather Network at IRREC.

Hamlin orange trial

Location: Hardee County

Citrus variety: 6-year old Hamlin

Tree spacing: 12 ft x 25 ft spacing, 145 trees per acre

Randomized complete block: 4 plots of 5 trees/plot (5 trees in a row, 20 trees per

treatment). Each plot is approx 0.137 acres.

Spray volume and application: 8 applications by speed sprayer @ approx.160 gal/acre

using speed sprayer because of larger canopy volume

Spray interval: every 21 days from mid April to September.

Spray dates: 4/29; 5/21; 6/12; 7/3; 7/21; 8/13; 9/1; 9/24

Disease evaluations:

Fruit drop: all fruit on the ground under the middle 3 trees in each plot was periodically collected and evaluated for cause of fruit drop and fruit diameter is measured to determine the size of the fruit when it was infected and dropped. Fruit drop counts were performed in 6/4, 7/23, 8/20, 9/17.

Fruit disease: Prior to harvest incidence of fruit with canker lesions, the age of the lesions and severity of lesions was assessed on 100 fruit collected from the middle 3 trees in each plot. Lesions are classified as "old" if they are larger than 0.25 inches in diameter, coalescing with surrounding lesions, black in color, exuding gum or have a prominent yellow halo; and "young" if lesions are smaller than 0.25 inches in diameter, brown in color, and not coalescing with surrounding lesions.

Table 3: Formulations, rates and manufacturers of products tested in the Hamlin trials

Treatment	Manufacturer /supplier	Metallic Cu (%) or a.i.(%)	Rate (lbs/acre)	Metallic Cu/acre
Kocide 3000	Dupont	30	2.0	0.66
Kocide 3000	Dupont	30	1.5	0.48
Kocide 3000	Dupont	30	1.0	0.30
Cuprofix Ultra 40	United Phosphorus	40	1.75	0.70
Cuprofix Ultra 40	United Phosphorus	40	1.5	0.60
Cuprofix Ultra 40	United Phosphorus	40	1.13	0.45
Champ DP	Nufarm	37.5	1.6	0.60
Kentan DF	Isagro	40	1.5	0.60
Badge SC	Isagro	20	2.11pt/ac	0.60
IRF070	Isagro	28	2.14	0.60

Cuproraxt		27	10 oz	0.45	
Kocide 3000 + Dupont Byotrol*		30	1.0 7.28oz/gal	0.30	
Magna-Bon	Chelated copper	5	0.63	0.03	
Untreated check		-			

^{*} Byotrol is a disinfectant/cleaner (Byotrol, Inc. USA)

Table 4: Rainfall in Hardee Co. 2008 (site is approx. 20 mile west of Sebring)

Monthly rainfall (inches)	Mar.	April	May	June	July	Aug.	Sept.	Oct. Nov
Sebring 2007	4.80	4.15	0.39	9.77	7.78	11.84	3.78	3.26 0.36
Sebring ^z average	1.51	2.09	2.37	8.84	7.48	7.64	7.00	3.06 1.32

Average monthly rainfall from 2003-2007 obtained from the Florida Automated Weather Network at Sebring.

Objective 2: Establish the period of fruit susceptibility for grapefruit and early oranges

Approach to accomplish the objective:

The duration of fruit susceptibility to canker infection will be established by applying an increasing number of 21 day interval sprays to protect fruit through each stage of growth. In the grapefruit trial, the size of fruit when they become completely resistant to infection will be determined. In the orange trial, the size of fruit when infections of lesser incidence and severity occur but are no longer able to induce premature fruit drop will be determined. For grapefruit, the sprays began at Spring flush (early March) to control early season inoculum build-up on the leaves. In oranges the sprays will begin when fruit are 0.5-0.75 inches in diameter, the size at which the stomates open on the fruit surface.

Grapefruit Trial - Ft. Pierce

Protocol same as under Objective1

All apps with Kocide 3000 @ 2.0 lbs/acre

Treatments:

1st application in early March (3/7), 2nd app in late March (3/28), 3rd app Mid April (4/18), 4th app early May (5/9)), 5th app late May (5/30), 6th app mid June (6/20), 7th early July (7/11), 8th app early August (8/4), 9th app late August (8/26), 10th app - mid Sept. (9/15), 11th app early Oct. (10/7)), Untreated Check

Hamlin trial – Hardee County
Protocols same as under Objective1
All apps with Kocide 3000 2.0 lbs/acre
Treatments:

1st app in late April (4/29), 2nd app mid May (5/21), 3rd app early June (6/12), 4th app early July (7/3), 5 apps - one additional spray in late July (7/21), 6 apps - one additional spray in mid August (8/13), 7 apps - one additional spray in early Sept. (9/1)

Results

Objective1: To define rates and formulations for effective control of canker on grapefruit and Hamlin orange,

Grapefruit

Fruit drop

Because copper sprays started in early March and rainfall was very low in April-May (Table 2) during the early stages of fruit growth (¾ inch diameter), early season infection of fruit was minimal and fruit drop due to canker infection did not occur season long.

Fruit infection

Prior to Tropical Storm Fay on August 20-22, disease incidence on fruit in our field trials of 6-year-old red grapefruit was 10-20% for copper sprays applied at 21-day intervals compared to 35% in the nonsprayed treatment (Fig. 1). Post TS Fay, disease incidence on fruit increased to 30-40% on copper-treated trees and to 80% in the non-treated trees. The protective film of copper, regardless of rate and formulation, was almost completely overcome by the windblown rain from TS Fay. When canker bacteria are driven by rain droplets at speeds greater than 18 mph, they impact fruit and leaf surfaces and move past the copper film into stomates where they cause infection.

All copper treatments were effective in reducing canker incidence on fruit compared to the untreated check (UTC) (Fig. 1). None of the copper treatments gave significantly better control than the others although some trends can be noted. At the 2.0 lb/acre rate Kocide 3000 gave better control than Kocide 2000 at the equivalent rate. The 2.0 lb rate of Kocide 3000 performed better than the 1.0 lb rate. Treatments of Koicide 3000 at the 2.0 lb rate followed by two July applications Firewall alone, with oil, or with a 1.0 lb rate of Kocide produced the lowest total incidence of fruit disease. PDS with Kocide 3000 at the 2.0 lb rate did not perform better Kocide alone. Hamlin

Fruit drop

Before copper sprays were initiated, infection of Hamlins occurred during the early rains of April of 1 to 2 inches. The infection of very small fruit (1/4-1/2 inch daim.) resulted in a 40-70% increase of premature fruit drop in May (June 4 reading -Fig. 2). Copper sprays did little to reduce the rate of fruit drop due to early season infection of fruit. In July, 75% of the fruit drop was due to canker while in spray treatments drop due to canker ranged from 50-80%. In August and September, nearly 100% of the fruit drop was due to canker irrespective of treatment. Overall, disease control with copper applied after the early April rains and fruit infection was highly compromised for the remainder of the season.

Cumulative fruit drop due to canker was reduced by spray treatments with different copper formulations (Fig. 3). Although the reduction in drop was not statistically significant, the numerical reduction was substantial and varied from 25-75%. The estimated loss of fruit in the UTC trees was approx. 1.0 90 lb. box/tree and on average the copper treatments reduced fruit drop to approx. 1/3 box/tree. Based on a 5 box per tree production for the 6 year old Hamlins, the estimated yield loss in the UTC trees was 16% and the loss reduced to the 5% by copper treatments.

Fruit infection

The response to treatments of canker infected fruit was similar to that of fruit drop. Copper sprays reduced fruit infection but not significantly (Fig. 4). Treatments with lower fruit infection were those that had a greater number of plots protected from winds coming from the southeast direction. This explains why the treatments with lower rates of Kocide 3000 and Cuprofix outperformed the same formulations at higher rates. Magnabon, a chelated copper formulation, performed as well as the other standard copper formulations at a much lower rate of copper per application. Addition of the disinfectant Byotrol with the 1 lb/acre rate of Kocide 3000 did not produce disease control greater than that of the Kocide 3000 alone.

Objective 2: Establish the period of fruit susceptibility for grapefruit and early oranges Grapefruit

Irrespective of the number of sprays of Kocide 3000 at the 2.0 lb rate, because of the impact of TS Fay, the difference in new lesions among treatments was minimal (Fig. 5). In contrast sprays applied pre TS Fay gave progressively better control with increasing number of sprays whereas after TS Fay the effect of additional sprays was minimal.

Hamlin

Sprays of Kocide 3000 at the 2.0 lb rate did little to reduce the rate of fruit drop due to early season infection of fruit. In July, 45-55% of the fruit drop was due to canker in spray treatments as well as the untreated check (Fig. 6). In August -October, nearly 100% of the fruit drop was due to canker irrespective of treatment. Overall, disease control with copper applied after the early April rains and fruit infection was highly compromised for the remainder of the season. Cumulative fruit drop due to canker was not reduced by spray treatments with different copper formulations (Fig. 7).

Because of the early season infection of fruit in April the benefit of applying additional sprays was not seen. Canker incidence on fruit varied from 30 to 45 % irrespective of the number of sprays compared to 50% incidence in the untreated check (Fig. 8).

Conclusions

 Copper products are moderately effective for control of canker on fruit of highly susceptible grapefruit

- 2) TS Fay rendered all treatments ineffective for control due to overcoming of the film on the fruit surface by windblown rain. Firewall applied in July in advance of TS Fay gave somewhat more effective control than copper alone. This activity was seen as less incidence of fruit infection immediately after TS Fay. This is attributed to the ability of Firewall to become locally systemic and reduce the no. of post penetration infections.
- 3) Kocide 3000 at 2.0 lb performed better than an equivalent rate of Kocide 2000 and the higher rates were slightly more effective than the lower rate. This confirms the greater efficiency of this newer formulation compared to Kocide 2000. This was also observed in the 2007 grapefruit trial.
- 4) Polymer Delivery System (PDS), an adjuvant, did not increase the efficacy of Kocide 3000.
- 5) Best treatments reduced canker incidence on fruit to no lower than about 27%. This means that windbreaks are essential to sustain disease control on grapefruit for the fresh market
- 6) Infection of Hamlin fruit of ¼ to ½ inch diameter occurred during early April rains of unusually high wind intensity before copper sprays commenced in late April.
- 7) After early season infection of Hamlin, the subsequent season long sprays with copper formulations did not significantly reduce the incidence of canker on fruit and were only moderately effective for reducing fruit drop due to canker throughout the season.
- 8) Magnabon, a chelated copper formulation, performed as well as the other standard copper formulations at a much lower rate of copper per application.
- 9) Byotrol with the 1 lb/acre rate of Kocide 3000 did not produce disease control greater than that of the Kocide 3000 alone.

Recommendations

Evaluation of copper formulations for control of fruit disease and fruit drop on Hamlin should be initiated earlier to control infection on fruit from ½ to ½ inch diameter. Evaluation of Firewall should target the limited number of sprays in July in advance of the highest of risk of tropical weather. Well-timed Firewall applications may reduce infection post penetration as well as reduce the risk of copper burn.



Federal Register

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Copper Sulfate Pentahydrate; Exemption from the Requirement of a Tolerance

Note: EPA no longer updates this information, but it may be useful as a reference or resource.

[Federal Register: November 15, 2000 (Volume 65, Number 221)]
[Rules and Regulations]
[Page 68908-68912]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr15no00-23]

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[OPP-301060; FRL-6747-3] RIN 2070-AB78

Copper Sulfate Pentahydrate; Exemption from the Requirement of a Tolerance

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation establishes an exemption from the requirement of a tolerance for residues of copper sulfate pentahydrate when applied as a fungicide to raw agricultural commodities after harvest. Magna Bon Corporation submitted a petition to EPA under the Federal Food, Drug, and Cosmetic Act, as amended by the Food Quality Protection Act of 1996 requesting an exemption from the requirement of a tolerance. This regulation eliminates the need to establish a maximum permissible level for residues of copper sulfate pentahydrate. In this final rule, the Agency is also reordering the structure of 40 CFR 180.1001(b)(1) and 180.1021 to group most of the copper exemptions together. The reordering does not change the regulatory status of these chemicals.

DATES: This regulation is effective November 15, 2000. Objections and requests for hearings, identified by docket control number OPP-301060 must be received by EPA on or before January 16, 2001.

ADDRESSES: Written objections and hearing requests may be submitted by mail, in person, or by courier. Please follow the detailed instructions for each method as provided in Unit VIII. of the SUPPLEMENTARY INFORMATION. To ensure proper receipt by EPA, your objections and hearing requests must identify docket control number OPP-301060 in the subject line on the first page of your response.

FOR FURTHER INFORMATION CONTACT: By mail: Treva Alston, Registration Division (7505C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: (703) 308-8373; and e-mail address: alston.treva@epa.gov.

SUPPLEMENTARY INFORMATION:

- I. General Information
- A. Does this Action Apply to Me?

You may be affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. Potentially affected categories and entities may include, but are not limited to:

Categories	1	NAICS	Examples of Potentially Affected Entities	
Industry	111		Crop production	
	112		Animal production	
	311		Food manufacturing	
	32532		Pesticide manufacturing	

This listing is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed in the table could also be affected. The North American Industrial Classification System (NAICS) codes have been provided to assist you and others in determining whether or not this action might apply to certain entities. If you have questions regarding the applicability of this action to a particular entity, consult the person listed under FOR FURTHER INFORMATION CONTACT.

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- B. How Can I Get Additional Information, Including Copies of this Document and Other Related Documents?
- 1. Electronically. You may obtain electronic copies of this document, and certain other related documents that might be available electronically, from the EPA Internet Home Page at http://www.epa.gov/.

To access this document, on the Home Page select `Laws and Regulations,'' `Regulations and Proposed Rules,'' and then look up the entry for this document under the `Federal Register--Environmental Documents.'' You can also go directly to the Federal Register listings at http://www.epa.gov/fedrgstr/.

2. In person. The Agency has established an official record for this action under docket control number OPP-301060. The official record consists of the documents specifically referenced in this action, and other information related to this action, including any information claimed as Confidential Business Information (CBI). This official record includes the documents that are physically located in the docket, as well as the documents that are referenced in those documents. The public version of the official record does not include any information claimed as CBI. The public version of the official record, which includes printed, paper versions of any electronic comments submitted during an applicable comment period is available for inspection in the Public Information and Records Integrity Branch (PIRIB), Rm. 119, Crystal Mall #2, 1921 Jefferson Davis Hwy., Arlington, VA, from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The PIRIB telephone number is (703) 305-5805.

II. Background and Statutory Findings

In the Federal Register of July 14, 1999 (64 FR 37972) (FRL -6085-5), EPA issued a notice pursuant to section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. 346a, as amended by the Food Quality Protection Act (FQPA) (Public Law 104-170) announcing the filing of a pesticide petition (PP 8F4982) by Magna Bon Corporation, 3213 Ocean Drive, Vero Beach, Florida 32963. This notice included a summary of the petition prepared by the petitioner. There were no comments received in response to the notice of filing. Various copper containing substances have been exempted from tolerance requirements for numerous uses. 40 CFR 180.1001 (b) (1) exempts the listed copper compounds when applied to growing crops. However, these substances are not exempted from the requirement of a tolerance when applied to a crop at the time of or after harvest. Other exempted uses of copper include harvested fish and shellfish, meat, milk, poultry, eggs, and irrigated crops as specified in 40 CFR 180.1021. The petition requested that copper sulfate pentahydrate be exempted from the requirement of a tolerance when applied to raw agricultural commodities at 0.050 ppm. The Agency does not generally grant an exemption from the requirement of tolerance with a numerical limitation.

Section 408 (b) (2) (A) (i) of the FFDCA allows EPA to establish an exemption from the requirement for a tolerance (the legal limit for a pesticide chemical residue in or on a food) only if EPA determines that the tolerance is `safe.'' Section 408 (b) (2) (A) (ii) defines `safe' to mean that `there is a reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposures and all other exposures for which there is reliable information. 'This includes exposure through drinking water and in residential settings, but does not include occupational exposure. Section 408 (b) (2) (C) requires EPA to give special consideration to exposure of infants and children to the pesticide chemical residue in establishing a tolerance and to `ensure

that there is a reasonable certainty that no harm will result to infants and children from aggregate exposure to the pesticide chemical residue.... ''

EPA performs a number of analyses to determine the risks from aggregate exposure to pesticide residues. First, EPA determines the toxicity of pesticides. Second, EPA examines exposure to the pesticide through food, drinking water, and through other exposures that occur as a result of pesticide use in residential settings.

III. Toxicological Profile

Consistent with section 408(b)(2)(D) of FFDCA, EPA has reviewed the available scientific data and other relevant information in support of this action and considered its validity, completeness and reliability and the relationship of this information to human risk. EPA has also considered available information concerning the variability of the sensitivities of major identifiable subgroups of consumers, including infants and children. The nature of the toxic effects caused by copper sulfate pentahydrate are discussed in this unit.

There is adequate information available to characterize the toxicity of the copper ion. Copper is ubiquitous in nature and is a necessary nutritional element for both animals (including humans), and plants. Copper is found naturally in the food we eat, in the water we drink, in the air we breathe and in our bodies themselves. Some of the environmental copper is due to direct modification of the environment by man such as mining and smelting of the natural ore. It is one of 26 elements found essential to life. The copper ion is present in the adult human body at levels of 80-150 mg.

Oral ingestion of excessive amounts of the copper ion from pesticidal uses is unlikely. Copper compounds are irritating to the gastric mucosa. Ingestion of large amounts of copper results in prompt emesis. This protective reflex reduces the amount of copper ion available for absorption into the human body. Additionally, at high levels humans are also sensitive to the taste of copper. Because of this organoleptic property, oral ingestion would also serve to limit high doses.

Only a small percentage of ingested copper is absorbed, and most of the absorbed copper is excreted. The copper ion occurs naturally in many foods and the metabolism of copper is well understood. The Agency published a registration standard for copper sulfate in 1985. As indicated in the registration standard, there are several factors unique to copper which indicate that specific studies to fulfill the usual data requirements are not necessary to regulate copper sulfate as a pesticide. One of the foremost of these is the fact that copper is a required nutritional element for both plants and animals. It appears that more evidence is available to define the adverse effects of a deficiency in the diet than to show the toxic effects of an excess intake; in fact, no account has been found in the literature reviewed which describes a toxic effect to normal humans from ingestion of common foodstuffs containing copper. Because copper toxicity to man through the diet has not been shown in normal persons, little is known about the minimum levels of dietary copper necessary to cause evidence of adverse effects. This situation is likely due, to an effective homeostatic mechanism that is involved in the dietary intake of copper

and that protects man from excess body copper. This complex mechanism integrates absorption, retention, and excretion to stabilize the copper body burden. Given that copper is ubiquitous and is routinely consumed as part of the daily diet, it is unlikely that with current exposure patterns there would be any long term adverse effects.

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Sulfate has little toxic effect and is routinely used in medicine as a cathartic when combined with magnesium or sodium, the only adverse manifestation from this use being dehydration if water intake is concurrently limited.

IV. Aggregate Exposures

In examining aggregate exposure, FFDCA section 408 directs EPA to consider available information concerning exposures from the pesticide residue in food and all other nonoccupational exposures, including drinking water from ground water or surface water and exposure through pesticide use in gardens, lawns, or buildings (residential and other indoor uses).

EPA establishes exemptions from the requirement of a tolerance only in those cases where it can be clearly demonstrated that the risks from aggregate exposure to pesticide chemical residues under reasonably foreseeable circumstances will pose no appreciable risks to human health. In order to determine the risks from aggregate exposure to pesticide chemicals, the Agency considers the toxicity of the chemical in conjunction with possible exposure to residues of the chemical through food, drinking water, and through other exposures that occur as a result of pesticide use in residential settings. If EPA is able to determine that a finite tolerance is not necessary to ensure that there is a reasonable certainty that no harm will result from aggregate exposure, an exemption from the requirement of a tolerance may be established.

A. Dietary Exposure

Copper is ubiquitous in nature and is a necessary nutritional element for both animals (including humans) and plants. It is one of 26 elements found essential to life. The human body must have copper to stay healthy. In fact, for a variety of biochemical processes in the body to operate normally, copper must be part of our diet. Copper is needed for certain critical enzymes to function in the body. Too little copper in the body can actually lead to disease.

- 1. Food. The main source of copper for infants, children, and adults, regardless of age, is the diet. Copper is typically present in mineral rich foods like vegetables (potato, legumes (beans and peas), nuts (peanuts and pecans), grains (wheat and rye), fruits (peach and raisins), and chocolate in levels ranging from 0.3 to 3.9 ppm. A single day's diet may contain 10 mg or more of copper. The daily recommended allowance of copper for adults nutritional needs is 2 mg. It is not likely that the approval of this petition would significantly increase exposure over that of the existing levels of copper.
 - 2. Drinking water exposure. Copper is a natural element found in

the earth's crust. As a result, most of the world's surface water and ground water that is used for drinking purposes contains copper. The actual amount varies from region to region, depending on how much is present in the earth, but in almost all cases the amount of copper in water is extremely low. Naturally occurring copper in drinking water is safe for human consumption, even in rare instances where it is at levels high enough to impart a metallic taste to the water. The Agency has set a maximum contaminant level for copper at 1.3 ppm because the Agency believes that this level of protection would not cause any potential health problems, i.e. stomach and intestinal distress, liver and kidney damage, and anemia. It is not likely that the approval of this petition would significantly increase exposure over that of the existing levels of copper.

B. Other Non-Occupational Exposure

Copper compounds have many uses on crops (food as well as non food) and ornamentals as a fungicide.

- 1. Dermal exposure. Given the prevalence of copper in the environment, no significant increase above current levels would be expected from the dermal non-occupational use of copper sulfate pentahydrate.
- 2. Inhalation exposure. Air concentrations of copper are relatively low. A study based on several thousand samples assembled by EPA's Environmental Monitoring Systems Laboratory showed copper levels ranging from 0.003 to 7.32 micrograms per cubic meter. Other studies indicate that air levels of copper are much lower. The Agency does not expect the air concentration of copper to be significantly affected by the use of copper sulfate pentahydrate.

V. Cumulative Effects

The Agency believes that copper has no significant toxicity to humans and that no cumulative adverse effects are expected from long-term exposure to copper salts including copper sulfate pentahydrate. EPA does not have, at this time, available data to determine whether copper compounds have a common mechanism of toxicity with other substances or how to include this inert ingredient in a cumulative risk assessment. For the purposes of this tolerance action, EPA has not assumed that copper compounds have a common mechanism of toxicity with other substances.

VI. Determination of Safety for U.S. Population, Infants and Children

Copper sulfate pentahydrate is considered as Generally Recognized as Safe (GRAS) by the Food and Drug Administration. EPA has exempted various copper compounds from the requirement of a tolerance when used as aquatic herbicides (40 CFR 180.1021). Copper compounds are also exempt from the requirements of a tolerance when applied to growing crops when used as a plant fungicide in accordance with good agricultural practices (40 CFR 180.1001 (b)(1)).

1. U.S. population. Copper is a component of the human diet and an essential element. Use of copper sulfate pentahydrate is not expected

to increase the amount of copper in the diet as a result of its use on growing crops and post harvest use.

2. Infants and children. Copper is also a component of the diet of infants and children and also an essential element of their diet. Because of copper's low toxicity, EPA has not used a safety factor approach to analyze the safety of copper sulfate pentahydrate used in growing crops as well as post harvest. For similar reasons, an additional ten-fold margin of safety is not necessary for the protection of infants and children.

Based on the information in this preamble, EPA concludes that there is a reasonable certainty of no harm to the general population, including infants and children, from aggregate exposure to copper sulfate pentahydrate residues.

VII. Other Considerations

A. Analytical Method(s)

An analytical method is not required for enforcement purposes since the Agency is establishing an exemption from the requirement of a tolerance without any numerical limitation.

B. Existing Tolerance Exemptions

Copper sulfate pentahydrate has been exempted from the requirement of a tolerance under 40 CFR 180.1001(b)(1) when applied to growing crops.

C. International Tolerances

The Agency is not aware of any country requiring a tolerance for copper sulfate pentahydrate nor have any CODEX Maximum Residue Levels (MRLs) been established for any food crops at this time.

VIII. Conclusions

Based on the information in this preamble, EPA concludes that there is a reasonable certainty of no harm from

[[Page 68911]]

aggregate exposure to residues of copper sulfate pentahydrate. Accordingly, EPA finds that exempting post harvest uses of copper sulfate pentahydrate from the requirement of a tolerance will be safe. Although the petitioner requested an exemption with a maximum residue limit, the Agency does not generally grant an exemption from the requirement of a tolerance with a numerical limitation. Given the lack of toxicity of this compound, EPA is following its general practice of not establishing a numerical limitation with this exemption.

In examining the existing tolerance exemptions for copper compounds, it was observed that the exemptions from the requirement of a tolerance are in two places in the Code of Federal Regulations, 40 CFR 180.1001 (b) (1) and 40 CFR 180.1021. For ease of use, all of these exemptions from the requirement of a tolerance are being placed in

180.1021. While reordering of the structure of the CFR is occurring, there have not been any changes with respect to the exemptions from the requirement of a tolerance of these copper compounds. However, copper sulfate pentahydrate is now exempt from the requirement of a tolerance when applied as a fungicide to growing crops or to raw agricultural commodities after harvest.

IX. Objections and Hearing Requests

Under section 408(g) of the FFDCA, as amended by the FQPA, any person may file an objection to any aspect of this regulation and may also request a hearing on those objections. The EPA procedural regulations which govern the submission of objections and requests for hearings appear in 40 CFR part 178. Although the procedures in those regulations require some modification to reflect the amendments made to the FFDCA by the FQPA of 1996, EPA will continue to use those procedures, with appropriate adjustments, until the necessary modifications can be made. The new section 408(g) provides essentially the same process for persons to `object'' to a regulation for an exemption from the requirement of a tolerance issued by EPA under new section 408(d), as was provided in the old FFDCA sections 408 and 409. However, the period for filing objections is now 60 days, rather than 30 days.

A. What Do I Need to Do to File an Objection or Request a Hearing?

You must file your objection or request a hearing on this regulation in accordance with the instructions provided in this unit and in 40 CFR part 178. To ensure proper receipt by EPA, you must identify docket control number OPP-301060 in the subject line on the first page of your submission. All requests must be in writing, and must be mailed or delivered to the Hearing Clerk on or before January 16, 2001.

1. Filing the request. Your objection must specify the specific provisions in the regulation that you object to, and the grounds for the objections (40 CFR 178.25). If a hearing is requested, the objections must include a statement of the factual issues(s) on which a hearing is requested, the requestor's contentions on such issues, and a summary of any evidence relied upon by the objector (40 CFR 178.27). Information submitted in connection with an objection or hearing request may be claimed confidential by marking any part or all of that information as CBI. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. A copy of the information that does not contain CBI must be submitted for inclusion in the public record. Information not marked confidential may be disclosed publicly by EPA without prior notice.

Mail your written request to: Office of the Hearing Clerk (1900), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. You may also deliver your request to the Office of the Hearing Clerk in Rm. C400, Waterside Mall, 401 M St., SW., Washington, DC 20460. The Office of the Hearing Clerk is open from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Office of the Hearing Clerk is (202) 260-4865.

2. Tolerance fee payment. If you file an objection or request a

hearing, you must also pay the fee prescribed by 40 CFR 180.33(i) or request a waiver of that fee pursuant to 40 CFR 180.33(m). You must mail the fee to: EPA Headquarters Accounting Operations Branch, Office of Pesticide Programs, P.O. Box 360277M, Pittsburgh, PA 15251. Please identify the fee submission by labeling it `Tolerance Petition Fees.''

EPA is authorized to waive any fee requirement `when in the judgement of the Administrator such a waiver or refund is equitable and not contrary to the purpose of this subsection.'' For additional information regarding the waiver of these fees, you may contact James Tompkins by phone at (703) 305-5697, by email at tompkins.jim@epa.gov, or by mailing a request for information to Mr. Tompkins at Registration Division (7505C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

If you would like to request a waiver of the tolerance objection fees, you must mail your request for such a waiver to: James Hollins, Information Resources and Services Division (7502C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

3. Copies for the Docket. In addition to filing an objection or hearing request with the Hearing Clerk as described in Unit VIII.A., you should also send a copy of your request to the PIRIB for its inclusion in the official record that is described in Unit I.B.2. Mail your copies, identified by docket control number OPP-301060, to: Public Information and Records Integrity Branch, Information Resources and Services Division (7502C), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460. In person or by courier, bring a copy to the location of the PIRIB described in Unit I.B.2. You may also send an electronic copy of your request via e-mail to: opp-docket@epa.gov. Please use an ASCII file format and avoid the use of special characters and any form of encryption. Copies of electronic objections and hearing requests will also be accepted on disks in WordPerfect 6.1/8.0 file format or ASCII file format. Do not include any CBI in your electronic copy. You may also submit an electronic copy of your request at many Federal Depository Libraries.

B. When Will the Agency Grant a Request for a Hearing?

A request for a hearing will be granted if the Administrator determines that the material submitted shows the following: There is a genuine and substantial issue of fact; there is a reasonable possibility that available evidence identified by the requestor would, if established resolve one or more of such issues in favor of the requestor, taking into account uncontested claims or facts to the contrary; and resolution of the factual issues(s) in the manner sought by the requestor would be adequate to justify the action requested (40 CFR 178.32).

X. Regulatory Assessment Requirements

This final rule establishes an exemption from the tolerance requirement under FFDCA section 408(d) in response to a petition submitted to the Agency. The Office of Management and Budget (OMB) has exempted these types of actions from review under Executive Order

EPA National Organic Program (NOP) Information Sheet

Background

The NOP is a USDA program. Its regulatory authority derives from 7 CFR and the Organic Food Production Act of 1990. EPA assists USDA by providing clear identification on pesticide labels of pesticide products allowable for organic use. EPA's principal guiding document is PR Notice 2003-1. Until May of 2007, all EPA NOP applications were (should have been) processed by Bob Torla of BPPD.

Current Process

As a practical matter, the NOP application process is largely unchanged. Whereas in the past all NOP applications went directly to Bob Torla, they now go to Chris Pfeifer. No bean sheets or formal review requests are required. Simply call or email a request for NOP review to Chris Pfeifer; and then arrange for delivery of the application package to his cubicle or mailbox.

Chris Pfeifer's contact information: Organic Labeling Liaison, BPPD Potomac Yard One, 8th Floor, Cubicle# 8331 Ph# 703-308-0031

Email: pfeifer.chris@epa.gov

- Upon receipt of application, Chris Pfeifer enters the details of the application into a Log and then distributes the package for review to a member of the EPA NOP workgroup. Workgroup members are primarily from BPPD. They include: Russ Jones, Angela Gonzales, Annabel Waggoner, Mark Dow (RD), Akiva Abramovitch (RD) Karen Leavey (AD) and Chris Pfeifer. Once a product is reviewed, it is distributed to a second member of the NOP workgroup for concurrence.
- Despite the fact that the majority of reviewers are in BPPD, the workgroup also has members from RD and AD. This allows for greater NOP expertise in those divisions; and it should help those Divisions to process applications more expediently. (Note: All applications must still go through the NOP gatekeeper, Chris Pfeifer, and the NOP workgroup.)

Review Standards

- PR Notice 2003-1 provides only basic guidance for NOP reviews. All ingredients must also meet requirements of the NOP as expressed in the National List (7 CFR). The National List can be complicated; it details many qualifications and special exceptions. (e.g. The regulation involves many details involving manufacturing process, mitigation requirements, impurities content, use designations, etc...)
- All active ingredients must be unambiguously allowed per the National List; all inert ingredients must be on the historic (posted 2004) List 4. While List 4 has been amended to accommodate tolerance reassessment, this amended List 4 does not meet the character of the NOP. In order to maintain the integrity of the NOP, USDA has asked that EPA only approve applications using the historic/posted List 4. USDA has pledged to find a more tenable long-term solution.
- Any application seeking to add OMRI certification to a pesticide label requires full EPA NOP review.
- To date, the only approved language has been: "For Use in Organic Production;" "For Use in Organic Gardening;" and the OMRI logo and information.

EPA's National Organic Program Guidance

- The National Organic Program (NOP) is a USDA program. All matters of policy concerning the eligibility of Inert Ingredients for use in the NOP are determined by USDA. EPA's role is to assist USDA by assuring that USDA's policies are implemented with regard to organic claims made by registered pesticide products.
- USDA policy regarding Inert Ingredients and List 4 is summarized in the following USDA document:
 Instructions to Certifiers for Use of EPA List 4 Inert Ingredients
- If an applicant has questions with regard to the policy outlined in the above link, or wishes to petition USDA for
 the addition of another Inert Ingredient, EPA refers the applicant to USDA's NOP office. Program and contact
 information can be found through the following link: http://www.ams.usda.gov/nop/indexIE.htm
- Per USDA, any applicants seeking organic designation must assure that their inert ingredients can be found on this posted List 4, dated August 2004. No other Inert Ingredients (i.e. reassessed inert ingredients) will be considered for organic designation at this time. (Ingredients approved by 7 CFR part 205 excepted.)
- NOP applicants should be aware that the tolerance exemptions for the following ingredients still found in the
 above List 4 have since been revoked and are no longer approved for use in pesticide products under USDA's
 NOP: manganous oxide; polyglyceryl phthalate ester of coconut oil fatty acid; coumarone indene resin;
 pentaerythritol monostearate; pentaerythritol tetrastearate; acrylic acid methyl ester, polymer with acrylonitrile
 and 1,3-butadiene (tolerance exemption is called "Nitrile rubber modified acrylonitrile methylacrylate [CAS
 Reg. No. 27012-62-0] conforming to 21 CFR 177.1480"); sodium fluoride; and acetylated lanolin alcohol.
- For food uses, NOP applicants should cross-check their inert ingredients against the electronic Code of Federal Regulations (e-CFR) (40 CFR Part 180) to assure that their proposed uses remain covered by an appropriate tolerance exemption. The e-CFR can be found through the following link: http://www.gpoaccess.gov/ecfr/ (Select Title 40, Volume 23 (parts 150-189), and then part 180. The majority of inert ingredient tolerance exemptions are found in 180.910 160.)
- NOP applicants are responsible for providing sufficient information on their inert ingredients for EPA to make an NOP determination. Simply noting an ingredient as List 4 is often not sufficient. The NOP has many additional requirements for ingredients, which are intended to assure organic character of the formulation. EPA suggests applicants submit Manufacturing Process data for their product and technical data sheets and MSDS for their inert ingredients.
- NOP applicants using proprietary blends in their formulations should check with their suppliers to assure that all
 the constituent ingredients in their blend can be found on this posted List 4, dated August 2004. The owner of
 the propriety blend must submit to EPA a complete description of the blend's composition (trade name,
 chemical names, CAS Reg. No.s, and amount of each component the total of which must equal 100%).
- EPA's National Organic Program Contact Information: Chris Pfeifer
 Organic Labeling Liaison,
 Biopesticides and Pollution Prevention Division, EPA
 Ph# 703-308-0031
 Email: pfeifer.chris@epa.gov

EPA's National Organic Program

EPA's National Organic Program (NOP) was created to assist USDA's NOP in an effort "to facilitate commerce in food that is organically produced." EPA's participation is based on the understanding that organic agriculture also advances its own mission – "to protect human health and the environment." Specifically, EPA notes that organic pesticides generally confer reduced risks to agricultural workers, consumers, and the environment.

The EPA NOP assists USDA by reviewing pesticides for compliance with the National Organic Standards established by USDA and by providing clear identification on pesticide labels of pesticide products allowable for organic use. EPA's program facilitates organic reviews for registrants, and provides distinct marketing advantages to pesticides deemed organic. Moreover, EPA NOP's work makes it easier for agricultural workers to make organic determinations in the marketplace, and it allows USDA Organic Certifiers to more easily validate organic claims. Programmatic details of EPA NOP's work can be found in the following attached Pesticide Registration Notice: http://www.epa.gov/PR Notices/pr2003-1.pdf

EPA NOP assists USDA NOP in other less obvious ways as well:

- EPA NOP provides scientific and technical consultation to USDA NOP regarding the character of
 pesticidal ingredients, with particular regard to human toxicology and ecological effect.
- EPA NOP provides USDA NOP with an expert review process that allows certifiers and consumers a measure of confidence in the bona fides of organic products.
- EPA NOP provides USDA NOP expedited reviews and consultation in cases that involve emergency exemptions, special local needs, or other unique circumstances.
- EPA NOP corresponds regularly with USDA certifiers (and third part certifiers) to help assure the integrity of organic claims made by pesticide products used in agricultural production.

A summary of EPA's NOP 'Review Standards' provides a snapshot of its work:

- EPA NOP reviews all NOP pesticide applications for compliance with PR Notice 2003-1 and 7 CFR Part 205. In doing this, EPA NOP considers: 1)the acceptability of the formulation(s) and manufacturing processes; 2) the appropriateness of the use pattern with regard to agricultural scope; and 3) the acceptability of the formulation vis-à-vis the 'Evaluation Criteria' laid out in 7 CFR Part 205.600.
- EPA NOP reviews active ingredients to assure that they are either non-synthetic and/or that they are unambiguously allowed per the National List.
- EPA NOP reviews all inert ingredients to assure that they are in compliance with USDA's regulations and policies for inert ingredients allowable for organic production. Generally, inert ingredients found on EPA's List 4 of inerts prove eligible for organic use. EPA's List 4 is published on the EPA website at http://www.epa.gov/opprd001/inerts/lists.html. (Notably, some inert ingredients have been removed from EPA's List 4 since it was posted in August 2004, and EPA continues to revise its listing of inert ingredients.)
- EPA NOP requires organic review for all pesticide labels that make third party certification claims.
- EPA NOP reviews all NOP pesticide labels to assure that they contain only NOP approved language.

EPA's National Organic Program Contact Information:

Chris Pfeifer
Organic Labeling Liaison,
Biopesticides and Pollution Prevention Division, EPA
Ph# 703-308-0031

Email: pfeifer.chris@epa.gov



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

October 5, 2010

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

SUSAN WRIGHT MAGNA-BON II, LLC 1531 NW 25TH DRIVE OKEECHOBEE, FL 34972

PRODUCT NAME: MAGNA-BON BAHAMA KLEAR

COMPANY NAME: MAGNA-BON II, LLC

OPP IDENTIFICATION NUMBER: EPA FILE SYMBOL: 66675-3 EPA RECEIPT DATE: 10/01/10

SUBJECT: RECEIPT OF AMENDMENT

DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for an amendment and it has passed an administrative screen for completeness.

During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Antimicrobials Division, Risk Management Team 33, at (703) 308-6341.

Sincerely,

P. E. Moore

Front End Processing Staff
Information Services Branch
Information Technology & Resources Management Division

Fee for Service

{883220n~

This package includes the following	for Division
 New Registration Amendment Studies?	O AD O BPPD O RD Risk Mgr. 33
Receipt No. S- EPA File Symbol/Reg. No. Pin-Punch Date:	883220 66675-3 10/1/2010
This item is NOT subject t	o FFS action.
Action Code: Requested: Granted: Amount Due: \$	Parent/Child Decisions:
Inert Cleared for Intended Use	Uncleared Inert in Product
Reviewer: Team 3	Date: 10/05/2010
Remarks:	

100	United States	United States			tion	OPP Identifier Number	
ŞEPA				Registration Amendment Other			
	Applicati	on for Pesticide - Se	ction	ı			
1. Company/Product Number		2. EPA Product Me	100		3. Pr	roposed Classification	
Magna-Bon II, LLC /		Marshall Swind	ell		-1	None Restricted	
4. Company/Product (Name Magna-Bon II, LLC /		# 33					
5. Name and Address of Ap Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, Fl. 349 Check if thi			is sin	nilar or identi	cal in co	FIFRA Section 3(c)(3) omposition and labeling	
		Section - II					
✓ Amendment - Explai	n helow	[]	ad leb	els in repsonse	to		
		Agency le	tter da	ted	10		
Resubmission in res	ponse to Agency letter dated	"Me Too"	Applic	eation.			
Notification - Explain	below.	✓ Other - Ex	plain b	elow.			
1. Material This Product W	ill Be Packaged In:	Section - III					
Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging		2. Type of 0			
Yes	Yes	Yes	No Plastic Glass				
✓ No	√ No						
* Certification must be submitted	If "Yes" No. per Unit Packaging wgt. container	If "Yes" No. per Package wgt contain			Other (Specify)		
3. Location of Net Contents		etail Container 5, 30, 55, 250, 275 gallon	5. La	ocation of Lab	el Directi	ons	
6. Manner in Which Label is	s Affixed to Product Juithor Pape	graph Oth	er				
		Section - IV					
1. Contact Point (Complete	e items directly below for identificat	ion of individual to be contacted	, if nec	cessary, to pro	cess this	s application.)	
Name Susan Wright		Title General Manager			Telephon 1-800-84	ne No. Uğçlude Area Code) 15-1357	
	Certific ements I have made on this form an ny knowlinglly false or misleading so I law.	d all attachments thereto are tr				6. Date Application Received (Stamped)	
2. Signature	0.0	3. Title			I STATE		
Susan	How	General Manager					
4. Typed Name		5. Date					
Susan Wright	9-30-2010						

BAHAMA KLEAR[™] Algicide/Bactericide/Fungicide

FOR SWIMMING POOLS, OUTDOOR HOT TUBS AND SPAS AND FOR USE ON RAW AGRICULTURAL COMMODITIES

FOR ORGANIC PRODUCTION

Ingredients

Kaan Out Of the Basah of Children

Keep Out Of the Reach of Children DANGER

FIRST AID				
IF INHALED:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a Poison Control Center or Doctor for treatment advice.			
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or Doctor for treatment advice.			
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a Poison Control Center or Doctor for treatment advice.			
IF SWALLOWED:	Call a Poison Control Center or Doctor immediately for treatment advice. Have a person sip a glass of water, if able to swallow. Do not induce vomiting unless told to do so by the Poison Control Center or Doctor. Do not give anything by mouth to an unconscious person.			
Have the product of	ontainer or label with you when calling a poison control center or doctor, or going for treatment.			

Manufactured by:

MAGNA-BON II, LLC 1531 NW 25th Drive Okeechobee, FL 34972 863-357-0400

For Emergency Assistance Call CHEMTREC 1-800-424-9300

Amended August 7, 2007/ Page1 of 25

1 The language in parenthesis is only required on bulk containers, not on retail containers. .

2 This language is only required to appear on the bulk and non-household-use containers, not on household-use containers. It will not appear on household-use containers

3 In compliance with PR Notice 95-1, this effluent discharge statement will appear on containers that are equal to or greater than 50 lbs./5 gallons Per PR Notice 95-1, this language is not required for containers less than 50 pounds/5 gallons.

STORAGE AND DISPOSAL

Prohibition: Do not contaminate water, food or feed by storage or disposal.

Storage: Store in a safe place away from PETS AND KEEP OUT OF THE REACH OF CHILDREN. Store away from excessive heat. Magna-Bon Bahama Klear will freeze. Always keep container closed. Store Magna-Bon Bahama Klear in its original container only. [Bulk Magna-Bon Bahama Klear shall be stored and handled in 316L stainless steel, fiberglass, PVC's, polypropylenes or plastic equipment.] ¹ Keep away from galvanized pipe and any nylon storage handling equipment.

Pesticide Disposal: Excess Magna-Bon Bahama Klear should be disposed of through label use. Do not contaminate lakes, rivers or streams as this may cause fish kill. [Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.] ² In the event of a spill, neutralize with limestone or baking soda before disposal. Concentrate may deteriorate concrete.

Container Disposal: Do not reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved State and local procedures. [Rinsing and reuse of "totes" is permissible.] ¹

PRECAUTIONARY STATEMENTS Hazards To Humans And Domestic Animals

DANGER. Corrosive: Causes irreversible eye damage and skin irritation. Do not get into eyes or on clothing. Wear goggles or safety glasses. Harmful if swallowed, inhaled or absorbed through the skin. May cause allergic skin response. Avoid contact with skin. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. [Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.] ³

For Terrestrial Uses: This pesticide is toxic to fish and aquatic organisms. Do not apply directly to water or areas where surface water is present or to intertidal areas below the mean high mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

GENERAL INFORMATION

Magna-Bon Bahama Klear is a copper sulfate pentahydrate formulation used to control bacteria and algae in swimming pools and outdoor hot tubs and spas. It is used as a post harvest wash to control bacteria and fungi that cause spoilage in fruits and vegetables and is used on growing agricultural commodities to control bacteria and fungi.

Using water containing moderate to high amounts of sulfur may cause Magna-Bon Bahama Klear to neutralize. Whenever possible, use a compatibility jar test before mixing a whole tank.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Amended August 7, 2007/ Page2 of 25

1 The language in parenthesis is only required on bulk containers, not on retail containers. .

2 This language is only required to appear on the bulk and non-household-use containers, not on household-use containers. It will not appear on household-use containers

3 In compliance with PR Notice 95-1, this effluent discharge statement will appear on containers that are equal to or greater than 50 lbs./5 gallons Per PR Notice 95-1, this language is not required for containers less than 50 pounds/5 gallons.

Application:

For control of algae and odor causing bacteria in swimming pools, outdoor hot tubs and spas, add Magna-Bon Bahama Klear as per chart below.

	Water	Magna-Bon Bahama Klear
Swimming	15,000 Gal	1 – 3 Quarts
Pools:	30,000 Gal	2 - 6 Quarts
	60,000 Gal	4 -12 Quarts
Outdoor	235 Gal	1 Ounces
Hot Tubs	470 Gal	2 Ounces
and Spas:	700 Gal	3 Ounces

Application should be made before visible algae appear. Where visible algae is present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive build up of metallic copper. Magna-Bon Bahama Klear may be used at the higher rates to help control odors and algae during the winter months while the pool is not being used. Recommended application rates yield (1 ppm to 3 ppm) metallic copper.

[To control algae and bacteria in swimming pools, spas & hot tubs: Apply at the rate of 2 - 4 quarts of Magna-Bon Bahama Klear per 60,000 gallons. This will provide a level of 0.5 ppm to 1.0 ppm metallic copper. Application should be made before visible algae appear. Where visible algae are present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive buildup of metallic copper. Magna-Bon Bahama Klear may be used to help control pool odors and algae during winter months. Maintain the higher rate while the pool is not being used during the winter. Do not discharge treated pool effluent where it will drain into lakes, streams, ponds, or public water.] ⁴

General Algae/Bacteria Control:

For suppression of bacterial odors and for control of algae, apply in late spring or early summer when algae and bacteria first appear. The dosages are variable and depend upon algae/bacteria species, water hardness, water temperature, amount of algae/bacteria present, as well as whether water is clear, turbid, flowing or static. Preferably, the water should be clear with the temperature above 60 °F or 15.6 °C. Higher dosages are required at lower temperatures, higher algae/bacteria concentration, and for hard waters. Application should be done by pouring Magna-Bon Bahama Klear directly from the container into the pool, outdoor hot tub or spa. Several application points speed up dispersal. Static water requires less chemical for algae/bacteria control than does flowing water. Use higher dosages for Chara, Nitella and filamentous algae (pond scum), and lower dosages for planktonic algae. If there is uncertainty about the dosage, begin with a lower dose and increase until control is achieved, or until the maximum allowable level has been reached.

Amended August 7, 2007/ Page3 of 25

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For Use as a Post Harvest Wash an Agricultural Commodities: To use as an algicide, bactericide, fungicide post harvest wash the following directions apply.

For use as a post harvest wash, this product may be applied with any type of application equipment that gives thorough and uniform coverage. Devices may include, but are not limited to, dunk and dip tanks, spray applicators or fogging.

Washing raw agricultural commodities will both clean and control bacteria and fungi that cause spoilage. Depending on water quality and cleaning conditions, or when adding new processing water, add from one hundred three (103) up to one hundred twenty eight (128) fluid ounces of Magna-Bon Bahama Klear per one thousand (1,000) gallons of water. Allow thorough coverage of the commodity and then let dry. Rinsing is not required or recommended.

Depending on water quality, cleaning conditions or when adding new processing water, start at lower rinse rates. Add Bahama Klear as per the chart below.

BAHAMA KLEAR

RINSE WATER

25.6 ounces to 32 ounces	250	gallons
51.2 ounces to 64 ounces	500	gallons
103 ounces to 128 ounces	1,000	gallons

Remember: Commodities need only be immersed long enough to allow complete coverage.

FOR USE AS A FUNGICIDE/BACTERICIDE ON GROWING AGRICULTURAL COMMODITIES: For use as a systemic fungicide/bactericide on growing agricultural commodities, the following directions apply. For Organic Production: Bahama Klear must be used in a manner that minimizes accumulation of copper in the soil.

GENERAL INSTRUCTIONS

Bahama Klear may be applied with any type of application equipment that gives uniform coverage of all foliage, including ground, aerial and low volume sprayers as specified on this label. Equipment used for application should be PVC or 316L stainless steel. Bahama Klear is compatible with most fungal and insecticidal biopesticides when applied at least two (2) days before or after application of the biopesticide. Phytotoxicity – Although Bahama Klear has been tested on a wide variety of fruits, vegetables and nuts without phytotoxicity, there could be some varieties and cultivars that because of environmental factors and stages of growth could possibly foster systems. The per acre use rate of Bahama Klear is applicable for dilute spraying. Depending on the equipment used and the specific crop, the spray volume applied per acre will differ. Refer to the Minimum Recommended Spray Volume Table. Complete spray coverage is essential to assure optimum performance from Bahama Klear. When treating by aerial application or with low volume application equipment, unless you have had specific previous experience, it is advisable to test for compatibility and tolerance to crop injury prior to full scale commercial utilization.

Consult Bahama Klear label for specific rates and timing of application by crop. Where application rates and intervals are provided in a range (e.g., 2-4 fluid ounces and 7 to 10 days) the higher rates and shorter spray time intervals are recommended when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops. The use of a surfactant, such as Cell-U-WettTM is acceptable for plants having waxy or hairy surfaces. Bahama Klear works via surface contact with the plants and materials being treated. It is important to ensure that all surfaces are thoroughly wetted. Bahama Klear does not produce any visible residue or have a distinct odor. It does have a residual, especially if applied with a surfactant.

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SPECIAL PRECAUTIONS

- Do not mix with acidic compounds such as Alliette™ within 14 days before or after application of same.
- This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.
- Environmental conditions such as extended periods of wet weather, acid rain, etc., which alter the pH of the leaf surface may effect the performance of Bahama Klear resulting in possible phytotoxicity or loss of effectiveness.
- Do not mix with pot ash.
- It must be determined in the selection process if proper application equipment is available and if
 the waste associated with its use can be properly handled. Materials used on the construction of
 application equipment is also an important factor as agricultural chemicals are often reactive with
 soft metals such as aluminum and even some synthetic materials such as plastics, rubbers, etc..
 Therefore it is necessary when working with equipment containing these materials, that they are
 thoroughly flushed with clean water after each days use.

Personal Protective Equipment

Personal Protective Equipment: Some materials that are chemical-resistant to this product are listed below. Applicators and other handlers must wear:

- Long sleeved shirt
- Long pants
- Chemical resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride or viton
- Protective eyewear
- Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Workers Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, water, is: coveralls, protective eyewear, chemical resistant gloves, and shoes plus socks.

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NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Workers Protection Standard for agricultural pesticides, 40 CFR part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Do not allow re-entry into treated areas until sprays have dried.

GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: Sprinkler including center pivot, lateral move, end row, side (wheel) roll, traveler, big gun, solid set or hand move: flood (basin); furrow; border or drip (trickle) irrigation and system(s). Do not apply this product through any other type of irrigation systems.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety device for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Posting areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds or other public facilities not including public roads, or 2) when chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters of at least 2 ½ inches tall, and all letters and the symbol shall be in a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

This sign is in addition to any sign posted to comply with the Workers Protection Standard.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be

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CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER Cont'd.

discharged into a reservoir tank prior to pesticide introduction. There shall be a complete break (air gap) between the flow outlet end of the fill pipe and the top of the overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of liquid back toward the injection.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

When mixing, agitation is not necessary. Adjust the pH of the water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add Bahama Klear last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures.

Bahama Klear may be added through a traveling system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

SPRINKLER CHEMIGATION

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement pump (i.e., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

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SPRINKLER CHEMIGATION Cont'd.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the Bahama Klear **last**. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures.

May be added through a traveling irrigation system or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

FLOOR (BASIN), FURROW AND BORDER CHEMIGATION

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination back flow.
- b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of liquid back toward the injection pump.
- c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- f. Systems must use a metering pump, such as a positive displacement pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the Bahama Klear **last**. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the labels of all products used on the mixtures.

Bahama Klear may be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

DRIP (TRICKLE) CHEMIGATION

The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of liquid back toward the injection pump.

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DRIP (TRICKLE) CHEMIGATION Cont'd.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor pump stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump such as a positive displacement injection pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc, add the Bahama Klear last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures. Bahama Klear may be added through a traveling irrigation system continuously or at the last 30 of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

FOR SPRAY AND SOIL DRENCH APPLICATIONS

Always spray for total foliage coverage. When re-spraying the rates and severity of the disease vary with unforeseen conditions. However, in the event of severe disease, spraying intervals can be shortened to 3 to 5 days. At times, lower rates can be as effective as higher rates and should be tried first. Usually, preventive programs may be maintained at lower rates. Use of low volume spraying is effective against Botrytis and not effective against established powdery mildew and Xanthomonas infections. Also, applications on actively growing tissue may be more effective than applications on dormant tissue.

MINIMUM RECOMMENDED SPRAY VOLUME (GALLONS) PER ACRE WHEN APPLYING BAHAMA KLEAR

		GROUND			
CROP	AERIAL	DILUTE	CONCENTRATE*		
Vegetables	3	20	30		
Field Crops	3	20	30		
Small Fruits	5	150	30		
Vines	5	150	30		
Tree Crops	10	400	50		
Citrus	10	125	30		

*Pesticide application equipment such as Curtec® or other similar sprayers which are capable of obtaining coverage at low volumes may be used at as low as 20 gpa of spray volume.

The following specific instructions are based on general application procedures. The recommendations of the State Extension Service should be closely followed as to timing, frequency and numbers of sprays per season.

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FROST INJURY PROTECTION BACTERIAL ICE NUCLEATION INHIBITOR

Application of Bahama Klear made to all crops listed on this label at rates and stages of growth indicated on this label, at least 24 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria (<u>Pseudomonas syringae</u>, <u>Erwinia herbicola and Pseudomonas flourescens</u>) and may therefore provide some protection against light frost. Not recommended for those geographical areas where weather conditions favor severe frost.

The chart below is used to calculate correct ppm's* of active ingredient (A.I.) per volume of carrier water. These volumes can be used for either conventional or concentrated sprays.

AMOUNT OF BAHAMA KLEAR PER VOLUME OF WATER FOR PROPER PPM'S* OF APPLIED ACTIVE INGREDIENT (AS COPPER)

ppm's* of A.I.	30 gallons per acre	50 gallons per Acre	100 gallons per Acre	125 gallons per Acre	250 gallons per Acre	500 gallons per Acre
50	3.85 oz.	6.4 oz.	12.8 oz.	16 oz.	32 oz.	64 oz.
75	5.78 oz.	9.6 oz.	19.2 oz.	24 oz.	48 oz.	96 oz.
100	7.70 oz.	12.8 oz.	25.6 oz.	32. oz.	64 oz.	1 gal.
125	9.6 oz.	16 oz.	32 oz.	40 oz.	80 oz.	1.25 gal.
150	11.5 oz.	19.2 oz.	38.4 oz.	48 oz.	96 oz.	1.5 gal.
200	15.4 oz.	25.6 oz.	51.2 oz.	64 oz.	1 gal.	2 gal.
250	19.2 oz.	32 oz.	64 oz.	80 oz.	1.25 gal.	2.5 gal.

^{*} ppm = parts per million (as copper)

CITRUS

Grapefruit, Kumquat, Lemon, Lime, Orange, Tangelo, Tangerine

Disease	Rate per Acre	ppm's (copper) per 100 gallons of water	Instructions
Brown Rot	30-70 oz.	120-275 ppm	Apply at first indication of rain or first appearance of Brown Rot. Re-apply as needed during wet weather.
Greasy Spot, Pink Pitting	25.6-64 oz.	100-250 ppm	Apply during mid-summer.
Scab	25.6-64 oz.	100-250 ppm	Apply shortly before trees begin to flush. Re-apply at 2/3 petal fall. Re-apply 4 weeks later, if necessary.
Melanose	25.6-64 oz.	100-250 ppm	Apply 2 times per year before the onset of spring and autumn rains.
Canker (Suppression)	12.8-64 oz.	50-250 ppm	Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require additional applications. Number and timing of applications will be dependent on disease pressure. Under heavy pressure, each new flush of growth should be sprayed. Heavily infected trees should be sprayed with a minimum dosage of 250 ppm with
		** 12.6 lb.	a follow up spray after 7-14 days at 200 ppm.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu2+/A)2

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FIELD CROPS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Alfalfa	Cercospora Leaf Spot, Leptosphaerulina Leaf Spot	19.2-32 oz.	75-125 ppm	Apply 10 to 14 days before each harvest or earlier if disease threatens. NOTE: Spray injury may occur with sensitive varieties such as Lahontan.
Corn (Field Corn, Popcorn, Sweet corn)	Bacterial Stalk Rot	19.2-32 oz. ** 4.2 lb.	75-125 ppm	Begin treatment when disease first appears and repeat every 7 to 10 days or as needed. Use the higher rates and shorter spray intervals when conditions favor disease.
Peanut	Cercospora leaf Spot	19.2-25.6 oz.	75-100 ppm	Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14 day intervals or as needed. Reduce sprays to 7 day intervals during humid weather. Use the higher rates when conditions favor disease.
Potato	Early Blight, Late Blight	19.2-32 oz.	75-125 ppm	Apply 75 to 125 ppm at 7 to 10 day intervals or as needed starting when plants are 2 to 6 inches high in locations where disease is light. Add up to 32 oz. per acre when disease is more severe.
Sugar Beets	Cercospora Leaf Spot	19.2-38.4 oz.	75-150 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use higher rates when conditions favor disease. Addition of a sticker/spreader is recommended.
Wheat, Barley, Oats	Helminthosporium Spot Blotch, Septoria Leaf Blotch	19.2-25.6 oz.	75-100 ppm	Make First application at early heading and follow with second spray 10 days later. Use the higher rates when conditions favor disease.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu2+/A)2

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SMALL FRUITS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Blackberry (Aurora, Boysen, Cascade, Chehalem,	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dormant spray after pruning/training in the spring. If needed, agricultural-type spray oil may be added.
Logan, Marion, Santiam, Thornless Evergreen)	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	** 10.0 lb.	75 ppm	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
Blueberry	Bacterial Canker	32-51.2 oz.	125-200 ppm	Make application before fall rains and a second application 4 weeks later. Use the higher rates when conditions favor disease.
	Fruit Rot, Phomopsis Twig Blight	25.6-51.2 oz.	100-200 ppm	Dormant Application: Begin applications when bloom buds begin to swell. Make additional applications at 10 to 14 day intervals or as needed before blooms open.
Cranberry	Fruit Rot	51.2 oz.	200 ppm	Make application in late bloom. Apply one or two additional applications at 10 to 14 day intervals or as needed depending on disease severity.
	Rose Bloom	51.2 oz.	200 ppm	Apply three sprays on 10 to 14 day schedule or as needed as soon as symptoms are observed.
	Bacterial Stem Canker	51.2 oz.	200 ppm	Apply post harvest and again in spring at bud swell. Apply one or two additional applications at 10 to 14 intervals or as needed depending on disease severity.
	Leaf Blight, Red Leaf Spot, Stem Blight, Tip Blight (Monilinia)	51.2 oz.	200 ppm	Apply delayed dormant spray in the spring. Repeat at 10 to 14 day intervals or as needed through pre-bloom.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu²+/ A)²

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SMALL FRUITS (cont'd)

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Currant, Gooseberry	Anthracnose, Leaf Spot	64 oz.	250 ppm	Make Initial application after first leaves have expanded. Continue on a 10 to 14 day schedule or as needed during wet conditions in the spring. Make an additional application after harvest.
Raspberry	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dormant spray after training in the spring. If needed, agricultural-type spray oil may be added.
	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	** 10.0 lb.	75 ppm	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
Strawberry	Angular Leaf Spot (Xanthomonas), Leaf Blight, Leaf Scorch, Leaf Spot	19.2 25.6 oz. ** 8.19 lb.	75-100 ppm	Begin application when plants are established and continue on a weekly schedule throughout the season. Apply in at least 20 gallons of water. Use the higher rates when conditions favor disease. NOTE: Discontinue applications if signs of crop injury appear.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu2+/A)2

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TREE CROPS

Bacterial Blast (Pseudomonas), Bacterial Canker, Coryneum Blight (Shot Hole)	51.2-64 oz.	200-250 ppm	Make first application before fall rains and a second at late
			dormant. Use the higher rates when conditions favor disease. If needed, agricultural-type spray oil may be added. For Cherries: Where disease is severe, an additional application shortly after harvest may be required. NOTE: Foliar injury may occur from post-bloom sprays on almonds, especially on NePlus varieties.
Blossom Brown Rot, Coryneum Blight (Shot Hole)	51.2-64 oz. on almond, All others 60-90 oz.	200-250 ppm	Apply during early bloom. Do not apply after full bloom or injury may occur. Use the higher rates when rainfall is heavy and disease pressure is high.
Black Knot* (Plum)	32-64 oz.	125-250 ppm	Make application at bud swell up to early bloom for early disease suppression. Apply before full bloom. Use the higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury, do not use after full bloom.
Cherry Leaf Spot* (Sour Cherries Only)	38.4-64 oz.	150-250 ppm	Apply at petal fall as well as 1 to 2 times after petal fall. Use the lower rates where disease infection is light and use the higher rates for a dormant application or where disease infection is moderate to heavy. Do not apply to sweet cherry or the English Morello variety as severe injury will result. NOTE: Moderate to severe injury such as leaf spotting and defoliation may occur from post bloom applications.
	Coryneum Blight (Shot Hole) Black Knot* (Plum) Cherry Leaf Spot* (Sour	Coryneum Blight (Shot Hole) On almond, All others 60-90 oz. Black Knot* (Plum) 32-64 oz. Cherry Leaf Spot* (Sour 38.4-64 oz.	Coryneum Blight (Shot Hole) on almond, All others 60-90 oz. Black Knot* (Plum) 32-64 oz. Cherry Leaf Spot* (Sour Cherries Only) 38.4-64 oz. 150-250 ppm

^{**} Maximum Annual Load of copper applied per growing season (lb Cu²+/ A)²

Amended August 7, 2007/ Page 14 of 25

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Apple	Anthracnose, Blossom Blast, European Canker (Necria), Shoot Blast (Pseudomonas)	51.2-64 oz.	200-250 ppm	Apply before fall rains. Use the higher rates when conditions favor disease. NOTE: Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.
	Apple Scab, Fire Blight	High 51.2-64 oz.	200-250 ppm	Make application between silver- tip and green-tip. Apply as a full cover spray for early season disease suppression. NOTE: Moderate to severe crop injury may occur from late application; discontinue use when green-tip reaches ½ inch.
	Apple Scab	Low 19.2-25.6 oz.	75-125 ppm	Extended spray schedule where fruit finish is not a concern:
	Fire Blight	Low 19.2-25.6 oz.	75-100 ppm	Continued applications may be made at 5 to 7 day intervals or as needed between ½ inch green-tip and first cover spray. NOTE: Moderate to severe crop injury may result from this extended spray schedule. It is not intended for fresh market apples or for apples where fruit finish is a concern as it is likely to cause fruit russetting.
	Collar Rot, Crown Rot	32 oz.	125 ppm	Mix 100 gallons of water. Apply 4 gallons of solution as a drench on the lower trunk area of each tree. Apply in early spring or in fall after harvest for beast results. Do not apply to foliage or fruit.
Avocado	Anthracnose, Blotch, Scab	51.2-64 oz. ** 18.9 lb.	200-250 ppm	Apply when bloom buds begin to swell and continue application at monthly intervals for five to six applications. Use the higher rates when conditions favor disease.

** Maximum Annual Load of Copper per growing season (lb Cu²+/ A)²

Amended August 7, 2007/ Page 15 of 25

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Banana	Sigatoka (Black and Yellow)	19.2 oz.	75 ppm	Apply by air in 3 gallons of water. If needed, agricultural-type spray oil may be added. Apply on a 14 day schedule or as needed throughout the wet season. Apply at 21 day intervals or as needed during dry periods.
	Black Pitting	32 oz.	125 ppm	Mix 100 gallons of water. Apply to the fruit stem and the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.
Cacao	Black Pod	19.2-64 oz. ** 15.75 lb.	75-250 ppm	Begin applications at the start of the rainy season and continue while infection conditions persist.
Coffee	Coffee Berry Disease (Collectotrichum coffeanum)	38.4-64 oz.	150-250 ppm	Apply first spray after flowering and before onset of long rains and then at 21 to 28 day intervals or as needed until picking. Use the higher rates when conditions favor disease.
	Bacterial Blight (Pseudomonas syringae)	38.4-64 oz.	150-250 ppm	Begin spray program before the onset of long rainy periods and continue throughout the rainy season at 14 to 21 day intervals or as needed. The critical time for spraying to control disease is just before, during and after flowering(s), especially when coinciding with wet weather. Use the higher rates when rainfall is heavy and disease pressure is high.
	Leaf Rust (Hemileia vastatrix)	19.2-32 oz. ** 12.6lb.	75 ppm	Apply before the onset of rain and then at 21 day intervals or as needed while the rains continue. Use the higher rates when rainfall is heavy and disease pressure is high.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu2+/A)2

Amended August 7, 2007/ Page 16 of 25

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Coffee	Iron Spot (Cercospora coffeicola), Pink Disease (Corticium salmonicolor)	19.2 oz. ** 12.6 lb.	75 ppm	Use concentrate or dilute spray. Begin treatment at the start of wet season and continue at monthly intervals for three applications
Filbert	Bacterial Blight	64-128 oz.	250-500 ppm	Apply as a post harvest spray. In seasons of heavy rainfall, apply a second spray when three fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added.
	Eastern Filbert Blight	64-128 oz.	250-500 ppm	Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 2 week intervals or as needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added.
Mango	Anthracnose	38.4-64 oz.	150-250 ppm	Apply monthly after fruit set until harvest. Use the higher rates when rainfall is heavy and disease pressure is high.
Olive	Olive Knot, Peacock Spot	64-76.8 oz. ** 6.3 lb.	250-300 ppm	Make first application before winter rains begin. A second application in early spring should be made if disease is severe. Apply the higher rates for heavy disease pressure or when conditions favor disease development.
Peach, Nectarine	Bacterial Blast (Pseudomonas), Bacterial Canker, Bacterial Spot (Xanthomonas), Coryneum Blight (Shot Hole), Leaf Curl	** 18.0 lb.	200-300 ppm	Make first application before fall rains and a second at late dormant. For peach leaf curl, late dormant application must be made before leaf buds swell. Use the higher rates when rainfall and disease pressure is high. If needed, agricultural-type spray oil may be added.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu²+/ A)²

Amended August 7, 2007/ Page 17 of 25

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Peach, Nectarine	Blossom Brown Rot, Coryneum Blight (Shot Hole), Leaf Curl	51.2-76.8 oz.	200-300 ppm	Full cover spray at pink bud. Use the higher rates when conditions favor disease.
	Bacterial Spot	19.2 oz. ** 18.0 lb.	75 ppm	Post-bloom application applied at first and second cover sprays. NOTE: do not spray 3 weeks prior to harvest. Use only recommended rates. Spotting of leaves and defoliation may occur from use in cover sprays.
Pear	Fire Blight	19.2 oz.	75 ppm	Apply 5 day intervals or as needed throughout the bloom period. NOTE: Russetting may occur in copper sensitive varieties. Excessive dosages may cause fruit russet on any variety.
	Blossom Blast (Pseudomonas)	51.2-76.8 oz.	200-300 ppm	Apply before fall rains and again during dormancy before spring growth starts. Use the higher rates when disease pressure is high or when conditions favor disease development.
Pecan	Kernel Rot, Shuck Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella pyramidalis)	19.2-32 oz.	75-125 ppm	For suppression, apply in sufficient water to ensure complete spray coverage at 2 to 4 week intervals or as needed, starting at kernel growth and continue until shucks open. Use the higher rates and shorter spray intervals if frequent rainfall occurs.
	Ball Moss, Spanish Moss	38.4-64 oz.	150-250 ppm	Apply in 100 gallons of water in the spring when ball moss is actively growing, using 1 ½ gallons of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. The addition of a non-ionic surfactant will improve control. A second application may be required after 12 months.

** Maximum Annual Load of copper applied per growing season

(lb Cu2+/ A)2

Amended August 7, 2007/ Page 18 of 25

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Pistachio	Botryosphaeria Panicle and Shoot Blight, Botytris Blight, Late Blight (<i>Alternaria</i> alternata), Septoria Leaf Blight	32-64 oz. ** 8.4 lb.	125-250 ppm	Make initial application at bud swell and repeat on a 14 to 28 day schedule or as needed. If disease conditions are severe, use the higher rates and shorter spray intervals.
Quince	Fire Blight	19.2 oz.	75 ppm	Apply at 5 day intervals or as needed throughout the bloom period. Apply in adequate water for thorough coverage.
Walnut	Walnut Blight	38.4-64 oz.	150-250 ppm	Apply at first spray at early pre-bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage or as needed when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves and nutlets is essential for effective control. NOTE: Adequate control may not be obtained when copper tolerant species of <i>Xanthomonas</i> bacteria are
		** 25.2 lb		present.

VEGETABLES

VEGETABLES					
Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions	
Bean (Dry, Green)	Brown Spot, Common Blight, Halo Blight	19.2-25.6 oz.	75-100 ppm	For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14 day schedule or as needed depending on environmental conditions. Use the higher rates for more severe disease.	
Beet (Table Beet, Beet Greens)	Cercospora Leaf Spot	19.2-32 oz. ** 7.86 lb.	75-125 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use the higher rates when conditions favor disease.	
Carrot	Alternaria Leaf Spot, Cercospora Leaf Spot	19.2 oz.	75 ppm	Begin applications when disease first threatens and repeat at 7 to 14 day intervals or as needed depending on disease severity.	

^{**} Maximum Annual Load of copper applied per growing season (lb Cu2+/A)2

Amended August 7, 2007/ Page 19 of 25

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VEGETABLES (cont'd)

Crop	Disease	Rate /Acre	ppm's (copper) per 100 gallons of water	Instructions
Celery, Celeriac	Bacterial Blight, Cercospora Early Blight, Septoria Late Blight	19.2 oz.	75 ppm	Begin applications as soon as plants are first established in the field, repeating at 5 to 7 day intervals or as needed depending on disease severity and environmental conditions.
Crucifers (Broccoli, Brussel Sprout, Cabbage, Cauliflower, Collard Greens, Mustard Greens, Turnip Greens)	Black Leaf Spot (Alternia), Black Rot (Xanthomonas), Downy Mildew	19.2-25.6 oz.	75-100 ppm	Begin application after transplants are set in the field, or shortly after emergence of field seeded crops or when conditions favor disease development. Apply at 7 to 10 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage.
Cucurbits (Cantaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon)	Alternia Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Powdery Mildew, Watermelon Bacterial Fruit Blotch (suppression)	19.2-25.6 oz.	75-100 ppm	Begin applications prior to disease development and continue while conditions are favorable for disease development. Repeat at 5 to 7 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	19.2 oz.	75 ppm	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals or as needed depending on disease severity.
Okra	Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spot, Powdery Mildew	19.2-32 oz.	75 ppm	Begin treatment when disease first threatens and repeat every 5 to 10 days or as needed depending on disease severity. Use the higher rates and shorter spray intervals when conditions favor disease.

^{**} Maximum Annual Load of copper applied per growing season (lb Cu²+/ A)²

Amended August 7, 2007/ Page20 of 25

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VEGETABLES (cont'd)

Crop	Disease	Rate /Acre	ppm's (copper) per 100 gallons of water	Instructions
Onion, Garlic	Bacterial Blight, Downy Mildew, Purple Blotch	19.2 oz. ** 6.0 lb.	75 ppm	Begin when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals or as needed depending on disease severity. Can cause phytotoxicity to leaves.
Pea	Powdery Mildew	19.2-25.6 oz. ** 3.95 lb.	75-100 ppm	Begin applications when disease symptoms first appear and repeat weekly intervals or as needed. Use the higher rates when conditions favor disease.
Pepper	Anthracnose, Bacterial Spot, Cercospora Leaf Spot	19.2- 25.6 oz.	75-100 ppm	Begin applications when conditions first favor disease development and repeat at 7 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.
Spinach	Anthracnose, Blue Mold, Cercospora Leaf Spot, White Rust	19-25.6 oz. ** 3.95 lb.	75-100 ppm	Begin application when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Flecking may occur on spinach leaves.
Tomato	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	19.2-32 oz. ** 17.4 lb.	75-125 ppm	Begin applications when disease first threatens and repeat at 5 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.
Watercress	Cercospora, Leaf Spot	19.2 oz. ** 2.12 lb.	75 ppm	Begin applications when plants are first established in the field, repeating at 7 to 14 day intervals or as needed depending on disease severity. Do not exceed four applications per crop. Apply using ground spray equipment at no less than 50 gallons of spray solution per acre.

** Maximum Annual Load of copper applied per growing season (lb Cu2+/A)2

Amended August 7, 2007/ Page21 of 25

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VINES

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Grape	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	19.2-32 oz.	75-125 ppm	Begin applications at bud break with subsequent applications throughout the season depending on disease severity. Use the higher rates when conditions favor disease. NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara and Rosette.
Hops	Downy Mildew	19.2 oz.	75 ppm	Make crown treatments after pruning, but before training. After Training, additional treatments are needed at about 10 day intervals. NOTE: Discontinue use two weeks before harvest.
Kiwi	Erwinia herbicola, Pseudomonas flourescens, Pseudomonas syrinsae	38.4 oz.	150 ppm	Apply in 200 gallons of water per acre. Make applications on a monthly basis. A maximum of three applications may be made.

MISCELLANEOUS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Atemoya	Anthracnose	25.6-38.4 oz.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Carambola	Anthracnose	38.4-51.2 oz.	150-200 ppm	Make initial application before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Chives	Downy Mildew	19.2 oz. ** 2.65 lb.	75 ppm	Begin application when plants are established in the field. Repeat every 7 to 10 days or as needed depending on disease conditions.
Dill	Phoma Leaf Spot, Rhizoctonia Foliage Blight	19.2-25.6 oz. ** 3.95lb.	75-100 ppm	Begin applications when plants are first established in the field and repeat at 7-10 day intervals or as needed depending on disease severity and environmental conditions. Use the higher rates for severe disease.

Amended August 7, 2007/ Page22 of 25

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MISCELL ANEOUS (cont'd)

Plant	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Guava	Anthracnose, Red Algae	25.6-38.4 oz.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Litchi Anthracnose		25.6-38.4 oz. ** 4.92 lb.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Use the higher rates for severe disease.
Macadamia	Anthracnose	38.4-64 oz.	150-250 ppm	Initiate sprays at first sign of flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea)	38.4-64 oz. ** 9.44 lb.	150-250 ppm	Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease.
Mamey Sapote	Algal Leaf Spot	38.4-64 oz.	150-250 ppm	Apply when conditions favor disease development. Repeat on a 14 to 30 schedule or as needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease.

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Amended August 7, 2007/ Page23 of 25

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LIMITED WARRANTY AND LIMITATION OF REMEDIES

Seller warrants that the product conforms to the chemical description and is reasonably fit for the purpose stated on the label for use under normal conditions, but makes no other warranties of FITNESS or MERCHANTABILITY expressed or implied, or any other warranty if the product is used contrary to the label instructions or under abnormal conditions not foreseeable to the seller. In no case shall the seller be liable for more than the cost of the product to the buyer, and will in no event be liable for any consequential, special or indirect damages connected with the use or handling of this product. This product is offered and the buyer or user accepts it's subject to the foregoing terms which may not be varied.

Amended August 7, 2007/ Page24 of 25

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U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Antimicrobials Division (7510C) 1200 Pennsylvania Avenue NW Washington, D.C. 20460

NOTICE OF PESTICIDE:

Registration
x Reregistration

(under FIFRA, as amended)

EPA Reg. Number:

Date of Issuance

66675-3

SF

2 9 2010

Term of Issuance:

Conditional

Name of Pesticide Product:

Magna-Bon Bahama Klear

Name and Address of Registrant (include ZIP Code):

Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, FL 34972

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

Based on your response to the Copper Sulfate RED, EPA has reregistered this product subject to the comments recorded in the succeeding paragraph. This action is taken under the authority of section 4(g) (2) of the Federal Insecticide, Fungicide and Rodenticide Acts, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. The EPA may require submission of data at any time to maintain the registration of the subject product.

1. Make the following label changes:

a. Revise the EPA Registration Number to read "66675-3."

Signature of Approving Official:

Marshall Swindell

Product Manager Team-33

Regulatory Management Branch I Antimicrobials Division (7510P) Date:

SEP 2 9 2010

EPA Form 8570-6

- b. The appropriate signal word for this product is "Danger."
- c. As per the acute toxicity review, the First Aid Statements should be placed in the following order:

IF ON SKIN OR CLOTHING:....

IF IN EYES:.....

IF SWALLOWED:

IF INHALED:.....

- c. As per acute toxicity review, the Agency recommends that additional text should be added to the "Note to Physician" section that addresses the eye and skin irritation concerns to read as follows:
- technical information on symptomatology;
- use of supportive treatments to maintain life functions;
- medicine that will counteract the specific physiological effects of the pesticides;
- company telephone number to specific medical personnel who can provide specialized medical advice.
- d. Revise the Note to Physician section by adding the following statement to read as follows:
 - "Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage."
- e. As per the acute toxicity review, the Harzards to Humans and Domestic Animals must be revised to read as follows:
 - "DANGER. Corrosive. Fatal if absorbed through skin. Causes irreversible eye damage. Causes skin damage. Do not get on skin, in eyes, or on clothing. Harmful if swallowed. Wear coveralls over long sleeved shirt and long pants, goggle or face shield, chemical-resistant footwear plus socks, and chemical-resistant gloves made of any waterproof material, chemical resistant apron for mixing, loading, and cleaning equipment, and chemical resistant headgear for overhead exposure."

f. Revise the User Safety Requirements section by adding the following to read as follows:

"Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and Hot water. Keep and wash PPE separately from other laundry."

"Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them."

g. As per the acute toxicity review, the User Safety Recommendations to read as follows:

User Safety Recommendations

User should wash hands before, eating, drinking, chewing gum, using tobacco, or using the toilet.

User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

User should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing.

h. Revise the Environmental Hazards section to read as follows:

"This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff. This product has the potential for runoff for several months or more after application. Poorly drained soils and soils with shallow water tables are more prone to product runoff that contains this product. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas."

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate." i. Include the following text in the Environmental Hazards section to read as follows:

For terrestrial use. This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff.

- "Do not discharge effluent containing this product.....For guidance contact your State Water Board or Regional Office of the EPA."
- j. Revise the Storage and Disposal section as per PR Notice 2007-1.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec.6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Submit two (2) copies of the revised labeling bearing the labeling revisions listed above. A stamped copy of the label is enclosed for your records.

If you have questions concerning this matter, please contact me at (703) 308-6341 or by email at swindell.marshall@epa.gov or Karen M. Leavy at (703)308-6237 or by email at leavy.karen @epa.gov.

Sincerely,

Marshall Swindell

Product Manager 33

Regulatory Management Branch I Antimicrobials Division (7510P)

Enclosures: (Stamped Label)

BAHAMA KLEAR[™] Algicide/Bactericide/Fungicide

FOR SWIMMING POOLS, OUTDOOR HOT TUBS AND SPAS AND FOR USE ON RAW AGRICULTURAL COMMODITIES

Ingredients
Copper Sulfate Pentahydrate*...(CAS No.7758-99-8)..............

Total

*Equivalent to 5.0% metallic copper A Chelated Copper Product with COMMENTS in EPA Letter Dated:

19.8% 80.2% S

SEP 2 9 2010

100.0% Under the Federal 'nsecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No.

66675-3

Keep Out Of the Reach of Children DANGER

FIRST AID					
IF INHALED:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a Poison Control Center or Doctor for treatment advice.				
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or Doctor for treatment advice.				
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a Poison Control Center or Doctor for treatment advice.				
IF SWALLOWED:	Call a Poison Control Center or Doctor immediately for treatment advice. Have a person sip a glass of water, if able to swallow. Do not induce vomiting unless told to do so by the Poison Control Center or Doctor. Do not give anything by mouth to an unconscious person.				
Have the product of	ontainer or label with you when calling a poison control center or doctor, or going for treatment.				

EPA REG. NO. 66675-3 EPA EST. NO. 66675-FL-001

LOT NO.

Net Contents: 1 U.S. Gallon (3.78 Liters) - 9.9 lbs per U.S. Gallon (1.188 kg/l)

Manufactured by:

MAGNA-BON II, LLC 1531 NW 25th Drive Okeechobee, FL 34972 863-357-0400

For Emergency Assistance Call CHEMTREC 1-800-424-9300

Amended August 7, 2007/ Page1 of 27

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ACCEPTED with COMMENTS in EPA Letter Dated:

SEP 2 9 2010

STORAGE AND DISPOSAL

Under the Federal Insecticide, Prohibition: Do not contaminate water, food or feed by storage or disposal. Fungicide, and Rodenticide Act as Storage: Store in a safe place away from PETS AND KEEP OUT OF THE REACH OF CHILDREN sticide. Store away from excessive heat. Magna-Bon Bahama Klear will freeze. Always keep container coseds. No. Store Magna-Bon Bahama Klear in its original container only. [Bulk Magna-Bon Bahama Klear shall be stored and handled in 316L stainless steel, fiberglass, PVC's, polypropylenes or plastic equipment.] 1 Keep away from galvanized pipe and any nylon storage handling equipment.

Pesticide Disposal: Excess Magna-Bon Bahama Klear should be disposed of through label use. Do not contaminate lakes, rivers or streams as this may cause fish kill. [Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.] ² In the event of a spill, neutralize with limestone or baking soda before disposal. Concentrate may deteriorate concrete.

Container Disposal: Do not reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved State and local procedures. [Rinsing and reuse of "totes" is permissible.]

PRECAUTIONARY STATEMENTS **Hazards To Humans And Domestic Animals**

DANGER. Corrosive: Causes irreversible eye damage and skin irritation. Do not get into eyes or on clothing. Wear goggles or safety glasses. Harmful if swallowed, inhaled or absorbed through the skin. May cause allergic skin response. Avoid contact with skin. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. [Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.]

For Terrestrial Uses: This pesticide is toxic to fish and aquatic organisms. Do not apply directly to water or areas where surface water is present or to intertidal areas below the mean high mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. This product may contaminate water through runoff. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Drift and runoff may be hazardous to aquatic organisms in water adjacent to

Waters treated with this product may be hazardous to aquatic organisms. Treatment of aquatic weeds and algae can result in oxygen loss from decomposition of dead algae and weeds. This oxygen loss can cause fish and invertebrate suffocation. To minimize the hazard, do not treat more than 1/2 of the water body to avoid depletion of oxygen due to decaying vegetation. Wait at least 10 to 14 days between treatments. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. Consult with the State or local agency with primary responsibility for regulating pesticides before applying to public waters, to determine if a permit is required.

Certain water conditions including low pH (<6.5), low dissolved organic carbon (DOC) levels (3.0 mg/L or lower), and "soft" waters (i.e. alkalinity less than 50 mg/L), increases the potential acute toxicity to nontarget aquatic organisms.

Drift and runoff may be hazardous to agatic organisms in waters adjacent to treated areas.

Amended August 7, 2007/ Page2 of 27

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GENERAL INFORMATION

Magna-Bon Bahama Klear is a copper sulfate pentahydrate formulation used to control bacteria and algae in swimming pools and outdoor hot tubs and spas. It is used as a post harvest wash to control bacteria and fungi that cause spoilage in fruits and vegetables and is used on growing agricultural commodities to control bacteria and fungi.

Using water containing moderate to high amounts of sulfur may cause Magna-Bon Bahama Klear to neutralize. Whenever possible, use a compatibility jar test before mixing a whole tank.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This pesticide is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water when disposing washwaters or rinsate.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

For control of algae and odor causing bacteria in swimming pools, outdoor hot tubs and spas, add EPTED with COMMENTS in EPA Letter Dated:

Swimming Pools:	Water 15,000 Gal 30,000 Gal 60,000 Gal	Magna-Bon Bahama Klear 1 – 3 Quarts der the Federal Insecticide, 2 - 6 Quarts mended, for the pesticide, 4 -12 Quarts gistered under EPA Reg. No.		
Outdoor	235 Gal	1 Ounces 66675-3		
Hot Tubs	470 Gal	2 Ounces		
and Spas:	700 Gal	3 Ounces		

Application should be made before visible algae appear. Where visible algae is present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive build up of metallic copper. Magna-Bon Bahama Klear may be used at the higher rates to help control odors and algae during the winter months while the pool is not being used. Recommended application rates yield (1 ppm to 3 ppm) metallic copper.

[To control algae and bacteria in swimming pools, spas & hot tubs: Apply at the rate of 2 - 4 quarts of Magna-Bon Bahama Klear per 60,000 gallons. This will provide a level of 0.5 ppm to 1.0 ppm metallic copper. Application should be made before visible algae appear. Where visible algae are present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive buildup of metallic copper. Magna-Bon Bahama Klear may be used to help control pool odors and algae during winter months. Maintain the higher rate while the pool is not being used during the winter. Do not discharge treated pool effluent where it will drain into lakes, streams, ponds, or public water.]

Amended August 7, 2007/ Page3 of 27

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General Algae/Bacteria Control:

For suppression of bacterial odors and for control of algae, apply in late spring or early summer when algae and bacteria first appear. The dosages are variable and depend upon algae/bacteria species, water hardness, water temperature, amount of algae/bacteria present, as well as whether water is clear, turbid, flowing or static. Preferably, the water should be clear with the temperature above 60 °F or 15.6 °C. Higher dosages are required at lower temperatures, higher algae/bacteria concentration, and for hard waters. Application should be done by pouring Magna-Bon Bahama Klear directly from the container into the pool, outdoor hot tub or spa. Several application points speed up dispersal. Static water requires less chemical for algae/bacteria control than does flowing water. Use higher dosages for Chara, Nitella and filamentous algae (pond scum), and lower dosages for planktonic algae. If there is uncertainty about the dosage, begin with a lower dose and increase until control is achieved, or until the maximum allowable level has been reached.

For Use as a Post Harvest Wash an Agricultural Commodities: To use as an algicide, bactericide, fungicide post harvest wash the following directions apply.

For use as a post harvest wash, this product may be applied with any type of application equipment that gives thorough and uniform coverage. Devices may include, but are not limited to, dunk and dip tanks, spray applicators or fogging.

Washing raw agricultural commodities will both clean and control bacteria and fungi that cause spoilage. Depending on water quality and cleaning conditions, or when adding new processing water, add from one hundred three (103) up to one hundred twenty eight (128) fluid ounces of Magna-Bon Bahama Klear per one thousand (1,000) gallons of water. Allow thorough coverage of the commodity and then let dry. Rinsing is not required or recommended.

Depending on water quality, cleaning conditions or when adding new processing water, start at lower ACCEPTED rinse rates. Add Bahama Klear as per the chart below.

BAHAMA KLEAR

RINSE WATER

with COMMENTS in EPA Letter Dated:

25.6 ounces to 32 ounces 51.2 ounces to 64 ounces 103 ounces to 128 ounces

gallonsEP 2 9 2010 gallonser the Federal Insecticide, 500 gallonsicide, and Rodenticide Act as 1,000 amended, for the pesticide,

Remember: Commodities need only be immersed long enough to allow complete coverage.

FOR USE AS A FUNGICIDE/BACTERICIDE ON GROWING AGRICULTURAL COMMODITIES: For use as a systemic fungicide/bactericide on growing agricultural commodities, the following directions apply.

GENERAL INSTRUCTIONS

Bahama Klear may be applied with any type of application equipment that gives uniform coverage of all foliage, including ground, aerial and low volume sprayers as specified on this label. Equipment used for application should be PVC or 316L stainless steel. Bahama Klear is compatible with most fungal and insecticidal biopesticides when applied at least two (2) days before or after application of the biopesticide. Phytotoxicity - Although Bahama Klear has been tested on a wide variety of fruits, vegetables and nuts without phytotoxicity, there could be some varieties and cultivars that because of environmental factors and stages of growth could possibly foster systems. The per acre use rate of Bahama Klear is applicable for dilute spraying. Depending on the equipment used and the specific crop, the spray volume applied per acre will differ. Refer to the Minimum Recommended Spray Volume Table. Complete spray coverage is essential to assure optimum performance from Bahama Klear. When treating by aerial application or with low volume application equipment, unless you have had specific previous experience, it is advisable to test for compatibility and tolerance to crop injury prior to full scale commercial utilization.

Amended August 7, 2007/ Page4 of 27

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GENERAL INSTRUCTIONS Cont.

Consult Bahama Klear label for specific rates and timing of application by crop. Where application rates and intervals are provided in a range (e.g., 2-4 fluid ounces and 7 to 10 days) the higher rates and shorter spray time intervals are recommended when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops. The use of a surfactant, such as Cell-U-Wett™ is acceptable for plants having waxy or hairy surfaces. Bahama Klear works via surface contact with the plants and materials being treated. It is important to ensure that all surfaces are thoroughly wetted. Bahama Klear does not produce any visible residue or have a distinct odor. It does have a residual, especially if applied with a surfactant.

SPECIAL PRECAUTIONS

- Do not mix with acidic compounds such as Alliette™ within 14 days before or after application of
- This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.
- Environmental conditions such as extended periods of wet weather, acid rain, etc., which alter the pH of the leaf surface may effect the performance of Bahama Klear resulting in possible phytotoxicity or loss of effectiveness.
- Do not mix with pot ash.
- It must be determined in the selection process if proper application equipment is available and if the waste associated with its use can be properly handled. Materials used on the construction of application equipment is also an important factor as agricultural chemicals are often reactive with soft metals such as aluminum and even some synthetic materials such as plastics, rubbers, etc. Therefore it is necessary when working with equipment containing these materials, that they are MMENTS thoroughly flushed with clean water after each days use. in EPA Letter Dated:

SEP 2 9 2010 Personal Protective Equipment

Under the Federal Insecticide,
Personal Protective Equipment: Some materials that are chemical-resistant to this product and Jake Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No.

66675-3

Long sleeved shirt

below. Applicators and other handlers must wear:

Long pants

Chemical resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride or viton

Protective evewear

Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with product's concentrate. Do not re-use them.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- User should remove PPE immediately after handling product. As soon as possible, wash thoroughly a change into clean clothing.

Amended August 7, 2007/ Page5 of 27

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AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Workers Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

Do not enter or allow others to enter until sprays have dried.

PPE required for early entry to treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, water, is: coveralls, protective eyewear, chemical resistant gloves, and shoes plus socks.

ACCEPTED with COMMENTS in EPA Letter Dated:

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Workers Protection Standard for agricultural pesticides, 40 CFR part 170. The WPS applies Index the Federal Insecticide, when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Do not allow re-entry into treated areas until sprays have dried.

2 9 2010

Fungicide, and Rodenticide Act as amended for the pesticide, registered under EPA Reg. No.

GENERAL CHEMIGATION INSTRUCTIONS

66675-3

Apply this product only through one or more of the following types of systems: Sprinkler including center pivot, lateral move, end row, side (wheel) roll, traveler, big gun, solid set or hand move: flood (basin); furrow; border or drip (trickle) irrigation and system(s). Do not apply this product through any other type of irrigation systems.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety device for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Posting areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds or other public facilities not including public roads, or 2) when chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has

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GENERAL CHEMIGATION INSTRUCTIONS Cont'd.

disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters of at least 2 ½ inches tall, and all letters and the symbol shall be in a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

This sign is in addition to any sign posted to comply with the Workers Protection Standard.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete break (air gap) between the flow outlet end of the fill pipe and the top of the overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of liquid back toward the injection.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

When mixing, agitation is not necessary. Adjust the pH of the water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add Bahama Klear last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures.

Bahama Klear may be added through a traveling system continuously or at the last 30 coinutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no aditation or a system.

SEP 2 9 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 6 6675-3

Amended August 7, 2007/ Page7 of 27

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SPRINKLER CHEMIGATION

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement pump (i.e., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the Bahama Klear last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures.

May be added through a traveling irrigation system or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

FLOOR (BASIN), FURROW AND BORDER CHEMIGATION

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the MENTS head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to letter Dated:

amended, for the pesticide,

decrease potential for water source contamination from back flow if water flow stops. Systems utilizing a pressurized water and pesticide injection system must meet the followinger the Federal Insecticide, Fungicide, and Rodenticide Act as requirements:

registered under EPA Reg. No. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination back flow.

66675-3

- b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of liquid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Amended August 7, 2007/ Page8 of 27

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f. Systems must use a metering pump, such as a positive displacement pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the Bahama Klear **last**. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the labels of all products used on the mixtures.

Bahama Klear may be added through a traveling irrigation system continuously or at the last ACCEPTED minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and the day in EPA Letter Dated:

in EPA Letter Dated:

DRIP (TRICKLE) CHEMIGATION

SEP 2 9 2010

The system must contain a functional check valve, vacuum relief valve and low pressure editain ederal Insecticide, appropriately located on the irrigation pipeline to prevent water source contamination from back flow enticide Act as amended, for the pesticide,

The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of liquid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor pump stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump such as a positive displacement injection pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc, add the Bahama Klear last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures. Bahama Klear may be added through a traveling irrigation system continuously or at the last 30 of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

FOR SPRAY AND SOIL DRENCH APPLICATIONS

Always spray for total foliage coverage. When re-spraying the rates and severity of the disease vary with unforeseen conditions. However, in the event of severe disease, spraying intervals can be shortened to 3 to 5 days. At times, lower rates can be as effective as higher rates and should be tried first. Usually, preventive programs may be maintained at lower rates. Use of low volume spraying is effective against Botrytis and not effective against established powdery mildew and Xanthomonas infections. Also, applications on actively growing tissue may be more effective than applications on dormant tissue.

Amended August 7, 2007/ Page9 of 27

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MINIMUM RECOMMENDED SPRAY VOLUME (GALLONS) PER ACRE WHEN APPLYING BAHAMA KLEAR

		GROUND			
CROP	AERIAL	DILUTE	CONCENTRATE*		
Vegetables	3	20	30		
Field Crops	3	20	30		
Small Fruits	5	150	30		
Vines	5	150	30		
Tree Crops	10	400	50		
Citrus	10	125	30		

*Pesticide application equipment such as Curtec® or other similar sprayers which are capable of obtaining coverage at low volumes may be used at as low as 20 gpa of spray volume.

The following specific instructions are based on general application procedures. The recommendations of the State Extension Service should be closely followed as to timing, frequency and numbers of sprays per season.

FROST INJURY PROTECTION BACTERIAL ICE NUCLEATION INHIBITOR

Application of Bahama Klear made to all crops listed on this label at rates and stages of growth indicated on this label, at least 24 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria (<u>Pseudomonas syringae</u>, <u>Erwinia herbicola and Pseudomonas flourescens</u>) and may therefore provide some protection against light frost. Not recommended for those geographical areas where weather conditions favor severe frost.

The chart below is used to calculate correct ppm's* of active ingredient (A.I.) per volume of carrier water. These volumes can be used for either conventional or concentrated sprays.

AMOUNT OF BAHAMA KLEAR PER VOLUME OF WATER FOR PROPER PPM'S* OF APPLIED ACTIVE INGREDIENT (AS COPPER)

	TORTHOLERT IN O OF ALTERED ACTIVE MOREDIETT PRO COLLERY						
ppm's* of A.I.	30 gallons per acre	50 gallons per Acre	100 gallons per Acre	125 gallons per Acre	250 gallons per Acre	500 gallons per Acre	
50	3.85 oz.	6.4 oz.	12.8 oz.	16 oz.	32 oz.	64 oz.	
75	5.78 oz.	9.6 oz.	19.2 oz.	24 oz.	48 oz.	96 oz.	
100	7.70 oz.	12.8 oz.	25.6 oz.	32. oz.	64 oz.	1 gal.	
125	9.6 oz.	16 oz.	32 oz.	40 oz.	80 oz.	1.25 gal.	
150	11.5 oz.	19.2 oz.	38.4 oz.	48 oz.	96 oz.	1.5 gal.	
200	15.4 oz.	25.6 oz.	51.2 oz.	64 oz.	1 gal.	2 gal.	
250	19.2 oz.	32 oz.	64 oz.	80 oz.	1.25 gal.	2.5 gal.	

* ppm = parts per million (as copper)

ACCEPTED with COMMENTS in EPA Letter Dated:

SEP 2 9 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 66675-3

Amended August 7, 2007/ Page 10 of 27

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CITRUS

Grapefruit, Kumquat, Lemon, Lime, Orange, Tangelo, Tangerine

Rate per Acre	ppm's (copper) per 100 gallons of water	Instructions
30-70 oz.	120-275 ppm	Apply at first indication of rain or first appearance of Brown Rot. Re-apply as needed during wet weather.
25.6-64 oz.	100-250 ppm	Apply during mid-summer.
25.6-64 oz.	100-250 ppm	Apply shortly before trees begin to flush. Re-apply at 2/3 petal fall. Re-apply 4 weeks later, if necessary.
25.6-64 oz.	100-250 ppm	Apply 2 times per year before the onset of spring and autumn rains.
12.8-64 oz.	50-250 ppm	Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require additional applications. Number and timing of applications will be dependent on disease pressure. Under heavy pressure, each new flush of growth should be sprayed. Heavily infected trees should be sprayed with a minimum dosage of 250 ppm with a follow up spray after 7-14 days at 200 ppm.
	30-70 oz. 25.6-64 oz. 25.6-64 oz. 25.6-64 oz.	(copper) per 100 gallons of water 30-70 oz. 120-275 ppm 25.6-64 oz. 100-250 ppm 25.6-64 oz. 100-250 ppm 25.6-64 oz. 100-250 ppm 12.8-64 oz. 50-250 ppm

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³

ACCEPTED with COMMENTS in EPA Letter Dated:

SEP 2 9 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No.

66675-3

Amended August 7, 2007/ Page11 of 27

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⁴ This is alternate Directions for Use language.

FIELD CROPS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Alfalfa	Cercospora Leaf Spot, Leptosphaerulina Leaf Spot	19.2-32 oz.	7.5-125 ppm 0.53 lbs ¹	Apply 10 to 14 days before each harvest or earlier if disease threatens. NOTE: Spray injury may occur with sensitive varieties such as Lahontan.
Corn (Field Corn, Popcorn, Sweet corn)	Bacterial Stalk Rot 4.2 lb.²	19.2-32 oz.	75-125 ppm	Begin treatment when disease first appears and repeat every 7 to 10 days or as needed. Use the higher rates and shorter spray intervals when conditions favor disease. *
Peanut	Cercospora leaf Spot	19.2-25.6 oz.	75-100 ppm	Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14 day intervals or as needed. Reduce sprays to 7 day intervals during humid weather. Use the higher rates when conditions favor disease.
Potato	4.74 lb.² Early Blight, Late Blight 25 lb.²	7 days ³ 19.2-32 oz. 5 days ³	75-125 ppm	Apply 75 to 125 ppm at 7 to 10 day intervals or as needed starting when plants are 2 to 6 inches high in locations where disease is light. Add up to 32 oz. per acre when disease is more severe.
Sugar Beets	Cercospora Leaf Spot 7.86 lb.²	19.2-38.4 oz.	75-150 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use higher rates when conditions favor disease. Addition of a sticker/spreader is recommended.
Wheat, Barley, Oats	Helminthosporium Spot Blotch, Septoria Leaf Blotch	19.2-25.6 oz.	75-100 ppm 0.53 lb. ¹	Make First application at early heading and follow with second spray 10 days later. Use the higher rates when conditions favor disease.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³
Not Permitted in California

ACCEPTED with COMMENTS in EPA Letter Dated:

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as amended, for the pesticide,
Amended Amend Process Process 27

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SMALL FRUITS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Blackberry (Aurora, Boysen, Cascade, Chehalem,	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dormant spray after pruning/training in the spring. If needed, agricultural-type spray oil may be added.
Logan, Marion, Santiam, Thornless Evergreen)	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	T days ³	75 ppm 2.9 lb.1	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
Blueberry	Bacterial Canker	32-51.2 oz.	125-200 ppm	Make application before fall rains and a second application 4 weeks later. Use the higher rates when conditions favor disease.*
	Fruit Rot, Phomopsis Twig Blight 8.4 lb. ²	25.6-51.2 oz.	100-200 ppm	Dormant Application: Begin applications when bloom buds begin to swell. Make additional applications at 10 to 14 day intervals or as needed before blooms open.
Cranberry	Fruit Rot	51.2 oz.	200 ppm	Make application in late bloom. Apply one or two additional applications at 10 to 14 day intervals or as needed depending on disease severity.
	Rose Bloom	51.2 oz.	200 ppm	Apply three sprays on 10 to 14 day schedule or as needed as soon as symptoms are observed.
	Bacterial Stem Canker	51.2 oz.	200 ppm	Apply post harvest and again in spring at bud swell. Apply one or two additional applications at 10 to 14 intervals or as needed depending on disease severity.
	Leaf Blight, Red Leaf Spot, Stem Blight, Tip Blight (Monilinia) 6.3 lb. ² Application Rate (lbs Cu ² +/A)	51.2 oz. 7 days³	200 ppm 2.1 lb. ¹	Apply delayed dormant spray in the spring. Repeat at 10 to 14 day intervals or as needed through pre-bloom.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²

Minimum Retreatment Interval³ Not Permitted in California* in EPA Letter Dated: SEP 2 9 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended for the pesticide, Amended August 7 200 page 12 pesticide, Amended August 2 200 page 12 pesticide,

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SMALL FRUITS (cont'd)

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Currant, Gooseberry	Anthracnose, Leaf Spot	64 oz.	250 ppm 2.5 lb.1	Make Initial application after first leaves have expanded. Continue on a 10 to 14 day schedule or as needed during wet conditions in the spring. Make an additional application after harvest.
Raspberry	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dormant spray after training in the spring. If needed, agricultural-type spray oil may be added.
	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	T days ³	75 ppm	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
Strawberry	Angular Leaf Spot (Xanthomonas), Leaf Blight, Leaf Scorch, Leaf Spot	19.2 25.6 oz.	75-100 ppm 1.5(severe disease) 1.0 lb.1	Begin application when plants are established and continue on a weekly schedule throughout the season. Apply in at least 20 gallons of water. Use the higher rates when conditions favor disease. NOTE: Discontinue applications if signs of crop injury appear.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³

ACCEPTED with COMMENTS in EPA Letter Dated:

SEP 2 9 2010
Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No.

66675-3

Amended August 7, 2007/ Page 14 of 27

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TREE CROPS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Almond, Apricot, Cherry, Plum Prune	Bacterial Blast (Pseudomonas), Bacterial Canker, Coryneum Blight (Shot Hole)	51.2-64 oz.	200-250 ppm	Make first application before fall rains and a second at late dormant. Use the higher rates when conditions favor disease. If needed, agricultural-type spray oil may be added. For Cherries: Where disease is severe, an additional application shortly after harvest may be required. NOTE: Foliar injury may occur from post-bloom sprays on almonds, especially on NePlus varieties.
	Blossom Brown Rot, Coryneum Blight (Shot Hole)	51.2-64 oz. on almond, All others 60-90 oz.	200-250 ppm	Apply during early bloom. Do not apply after full bloom or injury may occur. Use the higher rates when rainfall is heavy and disease pressure is high.
	Black Knot* (Plum)	32-64 oz.	125-250 ppm	Make application at bud swell up to early bloom for early disease suppression. Apply before full bloom. Use the higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury, do not use after full bloom.
	Cherry Leaf Spot* (Sour Cherries Only)	38.4-64 oz. Dormant/ Late Dormant 7	150-250 ppm	Apply at petal fall as well as 1 to 2 times after petal fall. Use the lower rates where disease infection is light and use the higher rates for a dormant application or where disease infection is moderate to heavy. Do not apply to sweet cherry or the English Morello variety as
		days Bloom/growing season 5	8.0 lb. ¹	severe injury will result. NOTE: Moderate to severe injury such as leaf spotting and defoliation may occur from post bloom
	18.0 lb. ²	days ³	1.5 lb.1	applications.

Maximum per Application Rate (lbs Cu²+/A)¹ Maximum Annual Rate (lbs Cu²+/A)² Minimum Retreatment Interval³ ACCEPTED with COMMENTS in EPA Letter Dated:

SEP 2 9 2010

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 26675-3
Amended August 7, 2007/ Page 15 of 27

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Apple	Anthracnose, Blossom Blast, European Canker (Necria), Shoot Blast (Pseudomonas)	51.2-64 oz.	200-250 ppm	Apply before fall rains. Use the higher rates when conditions favor disease. NOTE: Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.
	Apple Scab, Fire Blight	High 51.2-64 oz.	200-250 ppm	Make application between silver- tip and green-tip. Apply as a full cover spray for early season disease suppression. NOTE: Moderate to severe crop injury may occur from late application; discontinue use when green-tip reaches ½ inch.
	Apple Scab	Low 19.2-25.6 oz.	75-125 ppm	Extended spray schedule where fruit finish is not a concern:
	Fire Blight	Low 19.2-25.6 oz.	75-100 ppm	Continued applications may be made at 5 to 7 day intervals or as needed between ½ inch green-tip
with on EPA SEP Under the F Fungicide,	CCEPTED COMMENTS Letter Dated: 2 9 2000 Ederal Insecticide, and Rodenticide Act as for the pesticide,			and first cover spray. NOTE: Moderate to severe crop injury may result from this extended spray schedule. It is not intended for fresh market apples or for apples where fruit finish is a concern as it is likely to cause fruit
amended, registered	under EPA Reg. No.			russetting.
	Collar Rot, Crown Rot	32 oz. n/a(only 1 application per season permitted³	125 ppm Fall, late dormant 8.0 lb ¹	Mix 100 gallons of water. Apply 4 gallons of solution as a drench on the lower trunk area of each tree. Apply in early spring or in fall after harvest for beast results. Do not apply to foliage or fruit.
	16.0 lb.²	5 days³	0.5 lb.1	ELLE STANLEY AND A STANLEY
Avocado	Anthracnose, Blotch, Scab	51.2-64 oz.	200-250 ppm	Apply when bloom buds begin to swell and continue application at monthly intervals for five to six applications. Use the higher rates
	18.9 lb. ²	14 days³	3.15 lb.1	when conditions favor disease.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³

Amended August 7, 2007/ Page 16 of 27

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Banana	Sigatoka (Black and Yellow)	19.2 oz.	75 ppm	Apply by air in 3 gallons of water. If needed, agricultural-type spray oil may be added. Apply on a 14 day schedule or as needed throughout the wet season. Apply at 21 day intervals or as needed during dry periods.
	Black Pitting 18.9 lb. ²	32 oz. 7 days³	125 ppm	Mix 100 gallons of water. Apply to the fruit stem and the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.
Cacao	Black Pod 15.75 lb. ²	19.2-64 oz. 14 days³	75-250 ppm 3.15 lb.1	Begin applications at the start of the rainy season and continue while infection conditions persist.
Coffee	Coffee Berry Disease (Collectotrichum coffeanum)	38.4-64 oz.	150-250 ppm	Apply first spray after flowering and before onset of long rains and then at 21 to 28 day intervals or as needed until picking. Use the higher rates when conditions favor disease.
	IMENTS ter Dated: 2010 Il Insecticide, odenticide Act as	38.4-64 oz.	150-250 ppm	Begin spray program before the onset of long rainy periods and continue throughout the rainy season at 14 to 21 day intervals of as needed. The critical time for spraying to control disease is just before, during and after flowering(s), especially when coinciding with wet weather. Use the higher rates when rainfall is heavy and disease pressure is high.
	Leaf Rust (Hemileia vastatrix)	19.2-32 oz.	75 ppm	Apply before the onset of rain and then at 21 day intervals or as needed while the rains continue. Use the higher rates when rainfall is heavy and disease pressure is high.
	Iron Spot. (Cercospora coffeicola), Pink Disease (Cortium salmonicolor) 12.6 lb. ²	19.2 oz.	75 ppm	Use concentrate or dilute spray. Begin treatment at the start of wet season and continue at monthly intervals for three applications.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²

Minimum Retreatment Interval³

Amended August 7, 2007/ Page 17 of 27

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Filbert	Bacterial Blight	64-128 oz.	250-500 ppm	Apply as a post harvest spray. In seasons of heavy rainfall, apply a second spray when three fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added.**
with C in EPA SEP 2 Under the Fee Fungicide, an	Eastern Filbert Blight CCEPTED COMMENTS Letter Dated: 2 9 2010 deral Insecticide, ad Rodenticide Act as the pesticide, der EPA Reg. No. 66675-3 24.0 lbs.²	64-128 oz.	250-500 ppm	Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 2 week intervals or as needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added.
Mango	Anthracnose 18.2 lb. ²	38.4-64 oz.	150-250 ppm 2.6 lb.1	Apply monthly after fruit set until harvest. Use the higher rates when rainfall is heavy and disease pressure is high.*
Olive	Olive Knot, Peacock Spot 6.3 lb. ²	64-76.8 oz. 30 days³	250-300 ppm 3.15 lb.1	Make first application before winter rains begin. A second application in early spring should be made if disease is severe. Apply the higher rates for heavy disease pressure or when conditions favor disease development.
Peach, Nectarine	Bacterial Blast (Pseudomonas), Bacterial Canker, Bacterial Spot (Xanthomonas), Coryneum Blight (Shot Hole), Leaf Curl	51.2-76.8 oz	200-300 ppm	Make first application before fall rains and a second at late dormant. For peach leaf curl, late dormant application must be made before leaf buds swell. Use the higher rates when rainfall and disease pressure is high. If needed, agricultural-type spray oil may be added.

Maximum per Application Rate (lbs Cu2+/A)1 Maximum Annual Rate (lbs Cu2+/A)2 Minimum Retreatment Interval³

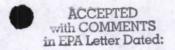
Permitted only in Washington State and Oregon**

Not permitted in California*

Amended August 7, 2007/ Page 18 of 27

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SEP 2 9 2010

TREE CROPS (cont'd)

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Under the Federal Insecticide, Fungicide, and Insecticide, amended, for the pesticide, registered under EPA Reg. No. 66 27
Peach, Nectarine	Blossom Brown Rot, Coryneum Blight (Shot Hole), Leaf Curl	51.2-76.8 oz.	200-300 ppm	Full cover spray at pink bud. Use the higher rates when conditions favor disease.
	Bacterial Spot	19.2 oz. Dormant, late dormant 7 days Bloom/ growing season 5 days	75 ppm 8.0 lb. 1.5 lb.	Post-bloom application applied at first and second cover sprays. NOTE: do not spray 3 weeks prior to harvest. Use only recommended rates. Spotting of leaves and defoliation may occur from use in cover sprays
Pear Fire Blight Blossom Blast (Pseudomonas)	Fire Blight	19.2 oz.	75 ppm	Apply 5 day intervals or as needed throughout the bloom period. NOTE: Russetting may occur in copper sensitive varieties. Excessive dosages may cause fruit russet on any variety.
		51.2-76.8 oz. Fall – 1 time per season³ Bloom/growing 5 days³	0.8 lb.1	Apply before fall rains and again during dormancy before spring growth starts. Use the higher rates when disease pressure is high or when conditions favor disease development.
Pecan	Kernel Rot, Shuck Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella pyramidalis)	19.2-32 oz.	75-125 ppm	For suppression, apply in sufficient water to ensure complete spray coverage at 2 to 4 week intervals or as needed, starting at kernel growth and continue until shucks open. Use the higher rates and shorter spray intervals if frequent rainfall occurs
	Ball Moss, Spanish Moss 8.4 lb. ²	38.4-64 oz.	150-250 ppm 2.1 lb.1	Apply in 100 gallons of water in the spring when ball moss is actively growing, using 1 ½ gallons of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. The addition of a non-ionic surfactant will improve control. A second application may be required after 12 months.

| 8.4 lb.² | Maximum per Application Rate (lbs Cu²+/A)¹ Maximum Annual Rate (lbs Cu²+/A)² Minimum Retreatment Interval³

Amended August 7, 2007/ Page19 of 27

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Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Pistachio	Botryosphaeria Panicle and Shoot Blight, Botytris Blight, Late Blight (<i>Alternaria</i> <i>alternata</i>), Septoria Leaf Blight 8.4 lb. ²	32-64 oz.	125-250 ppm 2.1 lb.1	Make initial application at bud swell and repeat on a 14 to 28 day schedule or as needed. If disease conditions are severe, use the higher rates and shorter spray intervals.
Quince	Fire Blight 16.0 lb. ²	19.2 oz. Fall, 1 time ³ Bloom, 5 days ³	75 ppm 8.0 lb. ¹ 0.5 lb. ¹	Apply at 5 day intervals or as needed throughout the bloom period. Apply in adequate water for thorough coverage.**
Walnut ACCEP with COM in EPA Lette SEP 2 9 20 Under the Federal Fungicide, and Ro amended, for the registered under E	Walnut Blight TED MENTS er Dated: Insecticide, denticide Act as pesticide, PA Reg. No. 66675-3	38.4-64 oz.	150-250 ppm	Apply at first spray at early pre-bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage or as needed when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves and nutlets is essential for effective control. NOTE: Adequate control may not be obtained when copper tolerant species of Xanthomonas bacteria are
	25.2 lb.2	7 days³	3.15 lb.1	present.

VEGETABLES

	VEGETABLES						
Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions			
Bean (Dry, Green)	Brown Spot, Common Blight, Halo Blight	19.2-25.6 oz. 7 days³	75-100 ppm 2.0 lb ¹	For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14 day schedule or as needed depending on environmental conditions. Use the higher rates for more severe disease.			
Beet (Table Beet, Beet Greens)	Cercospora Leaf Spot 7.86 lb. ²	19.2-32 oz.	75-125 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use the higher rates when conditions favor disease.			
Carrot	Alternaria Leaf Spot, Cercospora Leaf Spot 5.0 lb. ²	19.2 oz. 7 days³	75 ppm	Begin applications when disease first threatens and repeat at 7 to 14 day intervals or as needed depending on disease severity.			

Maximum per Application Rate (lbs Cu2+/A)1

Maximum Annual Rate (lbs Cu²+/A)²

Minimum Retreatment Interval³

Quince use not permitted in California**

Amended August 7, 2007/ Page20 of 27

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VEGETABLES (cont'd)

Crop	Disease	Rate /Acre	ppm's (copper) per 100 gallons of water	Instructions
Celery, Celeriac	Bacterial Blight, Cercospora Early Blight, Septoria Late Blight	19.2 oz.	75 ppm	Begin applications as soon as plants are first established in the field, repeating at 5 to 7 day intervals or as needed depending on disease severity and environmental conditions.**
Crucifers (Broccoli, Brussel Sprout, Cabbage, Cauliflower, Collard Greens, Mustard Greens, Turnip Greens)	Black Leaf Spot (Alternia), Black Rot (Xanthomonas), Downy Mildew 2.65 lb. ²	19.2-25.6 oz.	75-100 ppm	Begin application after transplants are set in the field, or shortly after emergence of field seeded crops or when conditions favor disease development. Apply at 7 to 10 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage.
Cucurbits (Cantaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon)	Alternia Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Powdery Mildew, Watermelon Bacterial Fruit Blotch (suppression)	19.2-25.6 oz.	75-100 ppm	Begin applications prior to disease development and continue while conditions are favorable for disease development. Repeat at 5 to 7 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	19.2 oz.	75 ppm	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals or as needed
Okra	7.9 lb.² Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spot, Powdery Mildew 5.25 lb.²	7 days ³ 19.2-32 oz. 5 days ³	0.79 lb.1 75 ppm	depending on disease severity. Begin treatment when disease first threatens and repeat every 5 to 10 days or as needed depending on disease severity. Use the higher rates and shorter spray intervals when conditions havor disease.*

Maximum per Application Rate (lbs Cu2+/A)1 Maximum Annual Rate (lbs Cu2+/A)2 Minimum Retreatment Interval³ Not for Use Celeriac in California** Not for Use in California*

in EPA Letter Dated: SEP 2 9 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 66615-3

Amended August 7, 2007/ Page21 of 27

1 The language in parenthesis is only required on bulk containers, not on retail containers.

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In compliance with PR Notice 95-1, this effluent discharge statement will appear on containers that are equal to or greater than 50 lbs./5 gallons Per PR Notice 95-1, this language is not required for containers less than 50 pounds/5 gallons.

VEGETABLES (cont'd)

Disease	Rate /Acre	ppm's (copper) per 100 gallons of water	Instructions
Bacterial Blight, Downy Mildew, Purple Blotch	19.2 oz.	75 ppm	Begin when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals or as needed depending on disease severity. Can cause phytotoxicity to leaves.
Powdery Mildew	19.2-25.6 oz.	75-100 ppm	Begin applications when disease symptoms first appear and repeat weekly intervals or as needed. Use the higher rates when conditions favor disease.
Anthracnose, Bacterial Spot, Cercospora Leaf Spot	19.2- 25.6 oz.	75-100 ppm	Begin applications when conditions first favor disease development and repeat at 7 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.
Anthracnose, Blue Mold, Cercospora Leaf Spot, White Rust	19-25.6 oz.	75-100 ppm 0.79 lb.1	Begin application when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Flecking may occur on spinach leaves.
Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot 17.4 lb. ²	19.2-32 oz. 3 days³	75-125 ppm 0.53 lb. ¹	Begin applications when disease first threatens and repeat at 5 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.
Cercospora, Leaf Spot	19.2 oz.	75 ppm	Begin applications when plants are first established in the field, repeating at 7 to 14 day intervals or as needed depending on disease severity. Do not exceed four applications per crop. Apply using ground spray equipment at no less than 50 gallons of spray solution per acre.*
	Bacterial Blight, Downy Mildew, Purple Blotch 6.0 lb.² Powdery Mildew 3.95 lb.² Anthracnose, Bacterial Spot, Cercospora Leaf Spot 11.85 lb.² Anthracnose, Blue Mold, Cercospora Leaf Spot, White Rust 3.95 lb.² Anthracnose, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot 17.4 lb.²	Bacterial Blight, Downy Mildew, Purple Blotch 6.0 lb.² Powdery Mildew 7 days³ 19.2-25.6 oz. 7 days³ 19.2-25.6 oz. 7 days³ 19.2-25.6 oz. 7 days³ 19.2-25.6 oz. 11.85 lb.² Anthracnose, Bacterial Spot, Cercospora Leaf Spot, White Rust 3.95 lb.² Anthracnose, Blue Mold, Cercospora Leaf Spot, White Rust 7 days³ 19-25.6 oz. 7 days³ 19-25.6 oz. 7 days³ 19-2-32 oz. 7 days³ 19.2-32 oz. 3 days³ 19.2-32 oz. 7 days³ 19.2-32 oz. 3 days³ 19.2-32 oz.	Bacterial Blight, Downy Mildew, Purple Blotch 6.0 lb.² Powdery Mildew 3.95 lb.² Anthracnose, Bacterial Spot, Cercospora Leaf Spot, White Rust 7 days³ 1.0 lb.¹ 7 days³ 1.0 lb.¹ 75-100 ppm 7 days³ 1.0 lb.¹ 75-100 ppm 19.2-25.6 oz. 75-100 ppm 3 days³ 1.0 lb.¹ 75-100 ppm 19.2-25.6 oz. 75-100 ppm 19.2-32 oz. 3.95 lb.² 75-125 ppm 19.2-32 oz. 75-125 ppm 3 days³ 1.0 lb.¹ 75-100 ppm

Maximum per Application Rate (lbs Cu2+/A)1

Maximum Annual Rate (lbs Cu²+/A)² Minimum Retreatment Interval³

Not for use in California*

ACCEPTED with COMMENTS in EPA Letter Dated:

SEP 2 9 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No.

66675-3

Amended August 7, 2007/ Page22 of 27

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VINES

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Grape	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	19.2-32 oz.	75-125 ppm	Begin applications at bud break with subsequent applications throughout the season depending on disease severity. Use the higher rates when conditions favor disease. NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara and Rosette.
Hops	Downy Mildew 2.65 lb.²	19.2 oz.	75 ppm 0.53 lb. ¹	Make crown treatments after pruning, but before training. After Training, additional treatments are needed at about 10 day intervals. NOTE: Discontinue use two weeks before harvest.
Kiwi	Erwinia herbicola, Pseudomonas flourescens, Pseudomonas syrinsae 6.3 lb.²	38.4 oz.	150 ppm	Apply in 200 gallons of water per acre. Make applications on a monthly basis. A maximum of three applications may be made.

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³

ACCEPTED with COMMENTS in EPA Letter Dated:

SEP 2 9 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No.

66675-3

Amended August 7, 2007/ Page23 of 27

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⁴ This is alternate Directions for Use language.

MISCELLANEOUS

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Atemoya	Anthracnose	25.6-38.4 oz.	100-150 ppm 3.15 lb.1	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease*.
Carambola	Anthracnose	38.4-51.2 oz.	150-200 ppm	Make initial application before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.*
Chives	Downy Mildew 2.65 lb. ²	19.2 oz.	75 ppm 0.53 lb. ¹	Begin application when plants are established in the field. Repeat every 7 to 10 days or as needed depending on disease conditions.*
Dill	Phoma Leaf Spot, Rhizoctonia Foliage Blight	19.2-25.6 oz 7 days³	75-100 ppm 0.79 lb.1	Begin applications when plants are first established in the field and repeat at 7-10 day intervals or as needed depending on disease severity and environmental conditions. Use the higher rates for severe disease.*

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³
Not for Use in California*

ACCEPTED with COMMENTS in EPA Letter Dated:

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 64675-3

Amended August 7, 2007/ Page24 of 27

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MISCELLANEOUS (cont'd)

Plant	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Guava	Anthracnose, Red Algae	25.6-38.4 oz.	1.23 lb.1	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Litchi	Anthracnose 4.92 lb.²	25.6-38.4 oz.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Use the higher rates for severe disease.*
Macadamia	Anthracnose	38.4-64 oz.	150-250 ppm	Initiate sprays at first sign of flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea) 9.44 lb. ²	38.4-64 oz. 7 days³	150-250 ppm 2.36 lb. ¹	Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease.
Mamey Sapote	Algal Leaf Spot	38.4-64 oz.	150-250 ppm	Apply when conditions favor disease development. Repeat on a 14 to 30 schedule or as needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease.*

Maximum per Application Rate (lbs Cu²+/A)¹
Maximum Annual Rate (lbs Cu²+/A)²
Minimum Retreatment Interval³
Not for Use in California*

ACCEPTED with COMMENTS in EPA Letter Dated:

SEP 2 9 2010

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
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Amended August 7, 2007/ Page25 of 27

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GREENHOUSE and SHADEHOUSE CROPS

Notice to Users: Magna-Bon Bahama Klear may be used in greenhouses and shade houses to control diseases on crops which appear on this label, and specific instructions have been developed for crops listed. The grower should bear in mind the sensitivity of crops grown in greenhouses and shadehouses differs greatly from crops grown under field conditions. Neither the manufacturer nor the seller has determined whether or not Magna-Bon Bahama Klear can be used safely on all green house and shadehouse grown crops. Consequently, injury arising from the use of Magna-Bon Bahama Klear on these types of greenhouse and shadehouse crops is the responsibility of the user. The user should determine if Magna-Bon Bahama Klear can be used safely prior to commercial use. In a small area, apply the recommended rates to the plants in question, i.e. foliage, fruit etc., and observe for 7 to 10 days for symptoms of phytotoxicity prior to commercial use.

Apply Magna-Bon Bahama Klear according to specific rates given for those crops in ounces per acre. One fluid ounce = 29.5 milliliters = 6 teaspoons per 1,000 square feet is equivalent to 21.5 ounces per acre. Magna-Bon Bahama Klear should be applied in adequate water for thorough coverage of plant parts. Begin application at first sign of disease and repeat at 7 to 14 day intervals or as needed; use shorter spray intervals during periods when severe disease conditions persist.

NOTE: Phytotoxicity may occur on young tender flush when Magna-Bon Bahama Klear is applied to

citrus seedlings grown in greenhouses or shadehouses.

Crop	Disease	Rate	Instructions
Citrus (Non-Bearing Nursery)	Brown Rot, Citrus Canker, Greasy Spot, Melanose, Pink Pitting, Scab	15 milliliters	Begin applications when disease first threatens. Repeat at 30 day intervals or as needed depending on disease severity.
Cucumber	Angular Leaf Spot, Downy Mildew	5-12 milliliters	Apply weekly when plants begin to vine. Use the higher rates when conditions favor disease.
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	9 milliliters	Begin applications prior to development of disease symptoms. Repeat at 7 to 10 day intervals or as needed depending on disease pressure.
ACCEPTED with COMMENTS in EPA Letter Dated: SEP 2 9 2010 Under the Federal Insecticide, Fungicide, and Roden	Bacterial Spot	9-15 milliliters	Begin applications when conditions favor disease development and repeat at 5 to 10 day intervals or as needed depending on severity. Use the higher rates when conditions favor disease.
Fungicide, and Redenticide Act as Tomato for the pesticide, registered under EPA Reg. No.	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	9-15 milliliters	Begin applications when disease first threatens and repeat at 5 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.

Amended August 7, 2007/ Page26 of 27

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LIMITED WARRANTY AND LIMITATION OF REMEDIES

Seller warrants that the product conforms to the chemical description and is reasonably fit for the purpose stated on the label for use under normal conditions, but makes no other warranties of FITNESS or MERCHANTABILITY expressed or implied, or any other warranty if the product is used contrary to the label instructions or under abnormal conditions not foreseeable to the seller. In no case shall the seller be liable for more than the cost of the product to the buyer, and will in no event be liable for any consequential, special or indirect damages connected with the use or handling of this product. This product is offered and the buyer or user accepts it's subject to the foregoing terms which may not be varied.

ACCEPTED with COMMENTS in EPA Letter Dated:

SEP 2.9 2010
Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No.

66675-3

Amended August 7, 2007/ Page27 of 27

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

CERTIFIED MAIL

Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, Fl. 34972 Attn: Ms. Susan Wright, General Manager

Subject: Review of Acute Toxicity Data for Copper Sulfate Reregistration Decision (RED), EPA Reg. No. 66675-3.

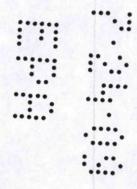
Dear Ms. Wright:

The Agency has reviewed your submission of acute toxicity data for the reregistration of EPA Reg. No. 66675-3. The data submitted in MRID 419161-01are accepted for Guideline 81-3, Acute Inhalation. The acute toxicity study requirements have been satisfied for the reregistration of Copper Sulfate, EPA Reg. Number 66675-3.

A copy of the Agency's Data Evaluation Record is enclosed. If you have any further questions, please contact Veronica Dutch of my staff at 703-308-8585.

Sincerely,

Patricia L. Moe, Chief Product Reregistration Branch Special Review and Reregistration Division







WASHINGTON, D.C. 20460

DEC 17 2008

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

CERTIFIED MAIL

Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, Fl. 34972

Attn: Ms. Susan Wright, General Manager

Subject: Review of Product Chemistry Data for Copper Sulfate Reregistration Decision

(RED), EPA Reg. No. 66675-3.

Dear Ms. Wright:

The Agency has reviewed your submission of product chemistry data for the reregistration of EPA Reg. No. 66675-3. The data submitted in MRID 475208-01 are accepted and the following guidelines are fulfilled: Guideline 830.1550, Product Identity and Composition Analysis; Guideline 830.1600, Description of Material Used to Produce the Product; Guideline 830.1650, Discussion of Formation of Process; Guideline 830.1670, Discussion of Formation of Impurities; Guideline 830.1750, Certified Limits; and Guideline 830.1800, Enforcement Analytical Method. Also, the data submitted MRID 475206-02 satisfy Guideline 830.6302, Color; Guideline 830.6303, Physical State; Guideline 830.6304, Odor; Guideline 830.7000, pH; Guideline 830.7100, Viscosity; and Guideline 7300, Density/Relative Density/Bulk.

The one-year, Storage Stability (Guideline 830.6317) and Corrosion Characteristics (Guideline 830.6320) studies are still in progress and will not be completed until April 2009. When the studies are completed, PRB/SRRD will review the results.

The Confidential Statement of Formula, dated August 18, 2008, is not acceptable because the pH value, 0.0-1.0, in the CSF box 8 does not correspond to the pH value, 2.05, given in MRID 446163-02. The registrant must clarify the discrepancy. The nominal concentration of the active ingredient agrees with that on the draft label, meeting the requirements of PR Notice 91-2. The certified limits for the active and inert ingredients are acceptable as per 40 CFR §158.175 (b)(2). All ingredients listed in the CSF are cleared for use in pesticide formulations.

The product chemistry statements of the draft label are acceptable. The active ingredient statement on the label is acceptable in accordance with PR Notice 91-2 and 40 CFR §156.10 (g). There are no physical/chemical hazards present in the product that will trigger the Physical or Chemical Hazards subheading.

The Storage and Disposal section of the draft label needs to be revised as follows:

- The statement "PROHIBITION: Do not contaminate water, food or feed by storage or disposal." should be changed to "Do not contaminate water, food or feed by storage and disposal." This statement should be placed in the beginning of the section under the STORAGE AND DISPOSAL heading, in accordance with 40 CFR 156.10 and PR Notice 83-3.
- The subheading "STORAGE" should be changed to "Pesticide Storage."
- It is recommended that the Storage and Disposal statements be presented in a text box for increased prominence.

The above recommendations to revise the Storage and Disposal section should be addressed during the label review.

You must submit all outstanding product chemistry data no later than April 2009. Failure to respond within this time frame may result in a Notice of Intent to Suspend (NOIS) affecting the registration of your product. Once all outstanding requirements have been satisfied, the Agency will have no objection to the reregistration of Copper Sulfate, EPA Reg. Number 66675-3.

A copy of the Agency's Data Evaluation Record is enclosed. If you have any further questions, please contact Veronica Dutch of my staff at 703-308-8585.

Sincerely,

Patricia L. Moe, Chief Product Reregistration Branch Special Review and Reregistration Division

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WASHINGTON, D.C. 20460

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OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

CERTIFIED MAIL

Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, Fl. 34972

Attn: Ms. Susan Wright, General Manager

Subject: Review of Acute Toxicity Data for Copper Sulfate Reregistration Decision

(RED), EPA Reg. No. 66675-3.

Dear Ms. Wright:

The Agency has reviewed your submission of acute toxicity data for the reregistration of EPA Reg. No. 66675-3. The data submitted in MRID 419161-01are accepted for Guideline 81-3, Acute Inhalation. The acute toxicity study requirements have been satisfied for the reregistration of Copper Sulfate, EPA Reg. Number 66675-3.

A copy of the Agency's Data Evaluation Record is enclosed. If you have any further questions, please contact Veronica Dutch of my staff at 703-308-8585.

Sincerely,

Patricia L. Moe, Chief

Product Reregistration Branch

Special Review and Reregistration Division

M.J. Perry for



WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

CERTIFIED MAIL

Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, Fl. 34972

Attn: Ms. Susan Wright, General Manager

Subject: Review of Acute Toxicity Data for Copper Sulfate Reregistration Decision

(RED), EPA Reg. No. 66675-3.

Dear Ms. Wright:

The Agency has reviewed your submission of acute toxicity data for the reregistration of EPA Reg. No. 66675-3. The data submitted in MRID 419161-01are accepted for Guideline 81-3, Acute Inhalation. The acute toxicity study requirements have been satisfied for the reregistration of Copper Sulfate, EPA Reg. Number 66675-3.

A copy of the Agency's Data Evaluation Record is enclosed. If you have any further questions, please contact Veronica Dutch of my staff at 703-308-8585.

Sincerely,

Patricia L. Moe, Chief Product Reregistration Branch Special Review and Reregistration Division

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WASHINGTON, D.C. 20460

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OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

CERTIFIED MAIL

Magna-Bon Il, LLC 1531 NW 25th Drive Okeechobee, Fl. 34972

Attn: Ms. Susan Wright, General Manager

Subject: Review of Toxicology Data for Copper Sulfate Reregistration Decision (RED),

EPA Reg. No. 66675-3.

Dear Ms. Wright:

The Agency has reviewed your submission of acute toxicity data for the reregistration of EPA Reg. No. 66675-3 and has made the following determinations:

In the 8 month response to the Coppers RED, the Registrant is requesting waivers for four of the acute toxicity studies, (guidelines 81-2, 81-4, 81-5 and 81-6) and is citing an acute inhalation study (guideline 81-3) to support the reregistration of their product, EPA Reg. No. 66675-3. The basis for this request is that the pH of the subject product is < 2. The request to waive the four (guidelines 81-2, 81-4, 81-5 and 81-6) studies are granted.

The submitted data (MRID# 475206-03) to satisfy Guideline 81-3, acute inhalation, was found to be acceptable to support the reregistration of EPA Reg. No. 66675-3. However, a data remains for acute oral, guideline 81-1. The Registrant is reminded to cite or submit an acute oral study for guideline 81-1.

If you choose to conduct a new study, you must notify the Agency of your intentions within 10 days of receipt of this letter and submit the data for this study within 60 days from receipt of this letter. Failure to respond within this time frame could result in a Notice of Intent to Suspend (NOIS) affecting the registration of your product. Once all outstanding data have been satisfied, the Agency will have no objection to the reregistration of Copper Sulfate Pentahydrate, EPA Reg. Number 66675-3.

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Should you have any further questions, please contact Veronica Dutch of my staff at 703-308-8585.

Sincerely,

Peter Caulkins, PhD, Acting Chief Product Reregistration Branch Special Review and Reregistration Division

Product ingredient source information may be entitled to confidential treatment

Form approved. OMB No. 2070-0060, 2070-0057, 2070-0107 0-0122, 2070-0164.



United States Environmental Protection Agency Washington, DC 20460

Formulator's Exemption Statement

(40 CFR 152.85)

Applicant's Name and Address

Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, Fl. 34972 EPA File Symbol/Registration Number 66675-3

Product Name

Magna-Bon Bahama Klear

Date of Confidential Statement of Formula (EPA Form 8570-4)

08/18/2008

As an authorized representative of the applicant for registration of the product identified above, I certify that:

- (1) This product contains the following active ingredient(s):
- (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another person and meets the requirements of 40 CFR section 158.50(e)(2) or (3).
- (3) Indicate by checking (A) or (B) below which paragraph applies:
- (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

- (B) The Confidential Statement of Formula (CSF)(EPA Form 8570-4) referenced above and on file with the EPA is complete, current, an accurate and contains the information required on the current CSF.
- (4) The following active ingredients in this product qualify for the formulator's exemption.

Source Active Ingredient **Product Name** Registration Number Copper Sulfate Pentahydrate Name and Title Susan Wright General Manager

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WASHINGTON, D.C. 20460

DEC 17 2008

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

CERTIFIED MAIL

Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, Fl. 34972

Attn: Ms. Susan Wright, General Manager

Subject: Review of Product Chemistry Data for Copper Sulfate Reregistration Decision

(RED), EPA Reg. No. 66675-4.

Dear Ms. Wright:

The Agency has reviewed your submission of product chemistry data for the reregistration of EPA Reg. No. 66675-4. The data submitted in MRID 475206-01 are accepted and the following guidelines are fulfilled: Guideline 830.1550, Product Identity and Composition Analysis; Guideline 830.1600, Description of Material Used to Produce the Product; Guideline 830.1650, Discussion of Formation of Process; Guideline 830.1670, Discussion of Formation of Impurities; Guideline 830.1750, Certified Limits; and Guideline 830.1800, Enforcement Analytical Method. Also, the data submitted MRID 475206-02 satisfy Guideline 830.6302, Color; Guideline 830.6303, Physical State; Guideline 830.6304, Odor; Guideline 830.7000, pH; Guideline 830.7100, Viscosity; and Guideline 7300, Density/Relative Density/Bulk.

The one-year, Storage Stability (Guideline 830.6317) and Corrosion Characteristics (Guideline 830.6320) studies are still in progress and will not be completed until April 2009. When the studies are completed, PRB/SRRD will review the results.

The Confidential Statement of Formula, dated August 18, 2008, is not acceptable because the pH value, 0.0-1.0, in the CSF box 8 does not correspond to the pH value, 2.05, given in MRID 446163-02. The registrant must clarify the discrepancy. The nominal concentration of the active ingredient agrees with that on the draft label, meeting the requirements of PR Notice 91-2. The certified limits for the active and inert ingredients are acceptable as per 40 CFR §158.175 (b)(2). All ingredients listed in the CSF are cleared for use in pesticide formulations.

The product chemistry statements of the draft label are acceptable. The active ingredient statement on the label is acceptable in accordance with PR Notice 91-2 and 40 CFR §156.10 (g). There are no physical/chemical hazards present in the product that will trigger the Physical or Chemical Hazards subheading.

You must submit all outstanding product chemistry data no later than April 2009. Failure to respond within this time frame may result in a Notice of Intent to Suspend (NOIS) affecting the registration of your product. Once all outstanding requirements have been satisfied, the Agency will have no objection to the reregistration of Copper Sulfate, EPA Reg. Number 66675-4.

A copy of the Agency's Data Evaluation Record is enclosed. If you have any further questions, please contact Veronica Dutch of my staff at 703-308-8585.

Sincerely,

Patricia L. Moe, Chief **Product Reregistration Branch** Special Review and Reregistration Division

- 0		CONCURRENCES		
SYMBOL < 7508-	2408P			
SURNAME < V DWICE	MOL,			
DATE < 12-15-08 1	MANON			
EDA Form 1220 14 (1/00)	100	D. and S. and J. J.	OF	EICIAL EILE CORV



August 18, 2008

ATTN: DOCUMENT PROCESSING DESK (REGFEE)

Registration Support Branch (7504P)
Office of Pesticide Programs
United States Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

To Whom It May Concern:

Magna-Bon II, LLC is submitting this document package for Magna-Bon Bahama Klear, EPA Reg. No. 66675-3, per the 8 month response in the DCI listed in the RED Document for Copper Sulfate. For this reason we should be REG FEE exempt. We hope you find this satisfactory.

If you have any questions, please call me at your earliest convenience. I can be reached daily in the office, 1-800-845-1357, or via email at magna1@strato.net.

Sincerely,

Susan Wright General Manager

Sevan WMA

Cc: File



Document Processing Desk (DCI/SRRD)
Veronica Dutch, Chemical Review Manager
Product Reregistration Branch
Special Review and Reregistration Branch 7508P
Office of Pesticide Programs
U.S. Environmental Protection Agency (7508P)
1200 Pennsylvania Ave. NW
Washington, DC 20460

Dear Ms. Dutch:

RE:

8 Month Response for Copper Sulfate

For EPA Reg. No(s). 66675-1, 66675-3, 66675-4

In response to the RED for Copper Sulfate this package contains the supporting data requirements stated in DCI for the 8 month response for Copper Sulfate for all 3 of our registrations.

All three supported EPA numbers are bundled separately.

In regards to supporting test data, the name of the product tested is either SCI-62 or Pro-Teck. This data is being used for all of our supported numbers, as we only manufacture one product and then for sales purposes have 3 (three) different EPA numbers. The product is all the same, just different names.

Once again, per the instructions sent to us, we are asking for a time extension for the Storage and Stability (830.6317)/Corrosion (830.6320). The product is now in the testing phase and will not be completed until April, 2009. We apologize for the delay.

I hope you find it satisfactory. If you have any questions regarding this, please contact me at your earliest convenience.

Sincerely,

Susan Wright General Manager

Sinan W

Attachments

1531 N.W. 25th Drive - Okeechobee, Fl. 34972 - 863. 357.0400 - 800.845.1357 Fax: 863.357.1083 e-mail: magna1@strato.net

TRANSMITTAL DOCUMENT

NAME AND ADDRESS	OF SUBMITTER: _	Magna-Bon II, LLC	
		1531 NW 25 th Drive	
		Okeechobee, Fl. 34	972
REGULATORY ACTION	N:_8 month response	e to DCI for RED - Co	pper Sulfate
TRANSMITTAL DATE:	August 18, 2008		
47520801	VOLUME 1- Product 0	Chemistry: Product Chemis	stry and Composition, Description of
Mrid No.	Materials Used to Prod	duce the Product, Descript	tion of Formulation Process, Discussion
	of Formation of Impurit	ies, Certified Limits, Enforce	cement Analytical Method
47520602	VOLUME 2- Physic	cal and Chemical Characte	eristics: Color, Physical State, Odor, pH,
Mrid No.	Viscosity, and Dens	ity/Relative Density	
47520603 Mrid No.	VOLUME 3 - Acute	Inhalation Toxicity Study in	n Rats – Limit Test
COMPANY OFFICIAL:	Susan Wright TYPED NAME		Swem Water SIGNATURE
COMPANY NAME: —			
COMPANY CONTACT:	Susan Wright TYPED NAME		800 845-1357 TELEPHONE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

September 15, 2008

MEMORANDUM:

Subject:

EPA Reg. No.: 66675-3/Magna-Bon Bahama Klear

DP Barcode: 356288

Case No.: 0636

From:

Marianne Lewis, Biologist

Product Reregistration Branch

Special Review and Reregistration Division (7508C)

To:

Veronica Dutch, CRM

Product Reregistration Branch

Special Review and Reregistration Division (7508C)

Applicant:

Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, FL 34972

FORMULATION FROM EPA Reg. No. 66675-3 LABEL:

 Active Ingredient(s):
 % by wt.

 Copper sulfate pentahydrate
 19.8%

 Inert Ingredient(s):
 80.2%

 Total
 100.0%

BACKGROUND: In the 8 month response to the Coppers RED, the registrant is requesting waivers for four (81-2, 81-4, 81-5, 81-6) of the acute toxicity studies and is citing an acute inhalation study (81-3) to support the reregistration of their product, EPA Reg. No. 66675-3. The basis for this request is that the pH of the subject product is < 2. The request to waive the four (81-2, 81-4, 81-5, 81-6) studies is granted. The acute inhalation study (MRID# 475206-03) was conducted by Product Safety Labs. The test material used in the study was EPA Reg. No. 66675-4 which is listed in Batch 4 (PC Code 024401) of the RED along with the subject product. The study was reviewed and found to be acceptable by PRB on 9/15/08.

RECOMMENDATIONS:

- The request to waive four (81-2, 81-4, 81-5, 81-6) of the acute toxicity studies is granted.
- The acute inhalation study (81-3) cited is acceptable to support the reregistration of EPA Reg. No. 66675-3.
- The registrant is reminded to cite or submit an acute oral study (81-1).

The acute toxicity profile for EPA Reg. No. 66675-3 is currently:

Acute Oral		Data Needed
Acute Dermal	I	Waived
Acute Inhalation	IV	Cited
Primary Eye	I	Waived
Primary Dermal	I	Waived
Skin Sensitization	non sensitizer	Waived

NOTE: The labeling will be completed upon receipt of the required information.

DATE OUT: 08/DEC/08

SUBJECT: PRODUCT CHEMISTRY REVIEW OF: TGAI []; MUP []; EUP [x]

BARCODE NO.: 356261 **REG./FILE SYMBOL NO.: 66675-3**

Magna-Bon Bahama Klear TM Algicide/Bactericide/Fungicide PRODUCT NAME:

MRID NOs.: 475208-01, 475206-02

COMPANY NAME: Magna-Bon II, LLC **ACTION CODE: 674** Shirley H. Keel, Environmental Protection Specialist

Product Chemistry Team

FROM:

TO: Veronica Dutch, CRM

Product Reregistration Branch

Special Review and Reregistration Division (7508P)

INTRODUCTION:

A Reregistration Eligibility Decision (RED) entitled Coppers, including Case Nos. 0636, 0649, 4025 and 4026, was issued in July 2006 for the Copper Compounds. This RED included 34 copper compounds of which 13 were indicated as having been cancelled. According to the Coppers RED, the generic database supporting the reregistration of Copper Compounds for their current uses has been reviewed and found to be substantially complete.

In the 8-month response to the Coppers RED, in support of the reregistration of Magna-Bon Bahama KlearTMAlgicide/Bactericide/Fungicide, EPA Reg. No. 66675-3, the registrant submitted a Confidential Statement of Formula (CSF), a basic formulation, dated 8/18/08; a draft label received by EPA on 8/25/08; and product chemistry data in MRID numbers 475208-01 and 475206-02.

FINDINGS:

- 1. EPA Reg. No. 66675-3 is an end-use product that contains the active ingredient Copper Sulfate Pentahydrate at a label claim nominal concentration of 19.8%.
- 2. The CSF for the basic formulation, dated 8/18/08, is not acceptable because the pH value, 0.0-1.0, in the CSF (box 8) does not correspond to the pH value, 2.05, stated in MRID No. 475206-02. Other information in the CSF is acceptable. The nominal concentration of the active ingredient agrees with that on the draft label, meeting the requirements of PR Notice 91-2. The certified limits for the active and inert ingredients are acceptable as per 40 CFR §158.175(b)(2). All ingredients listed in the CSF are cleared for use in pesticide formulations.
- 3. Except for Finding #4, the product chemistry data reported in MRID Nos. 475208-01 and 475206-02 satisfy the requirements of the Guidelines under Subgroups A and B, which pertain to the Product Identity, Composition and Analysis, and Physical and Chemical Properties respectively.

- The one-year Storage Stability and Corrosion Characteristics study is still in progress, and will
 not be completed until April 2009. When the study is completed, PRB/SRRD will review the
 results.
- The product chemistry statements of the draft label are acceptable. The Ingredient statement is in compliance with the requirements of 40 CFR 156.10(g) and PR Notice 91-2. There are no physical/chemical hazards present in the product that will trigger the Physical or Chemical Hazards subheading.
- 6. The Storage and Disposal section of the draft label needs to be revised.
 - The statement "PROHIBITION: Do not contaminate water, food or feed by storage or disposal." should be changed to "Do not contaminate water, food, or feed by storage and disposal." This statement should be placed in the beginning of the section under the STORAGE AND DISPOSAL heading, in accordance with 40 CFR 156.10 and the PR Notice 83-3.
 - The subheading "STORAGE" should be changed to "Pesticide Storage."
 - It is recommended that the Storage and Disposal statements be presented in a text box for increased prominence.

The above recommendations to revise the Storage and Disposal section should be addressed during the label review.

CONCLUSIONS:

Except for Findings #2 and #4, the registrant has satisfied the product chemistry data requirements for the reregistration of EPA Reg. No. 66675-3.

<u>Product Chemistry Data</u> Subgroup A: Series 830.1550 - 830.1800 (40 CFR 158.155 - 158.180)

GUIDELINE REFERENCE NO. (GRN)/ TITLE 830	40 CFR §	MRID Number	Data Fulfilled
.1550 Product Identity and Composition	158.320	475208-01 & CSF	Y
.1600 Description of Materials Used to Produce the Product	158.325	475208-01 (MSDS) & CSF	Y
.1650 Description of Formulation Process	158.335	475208-01	Y
.1670 Discussion of Formation of Impurities	158.340	475208-01	Y
.1750 Certified Limits	158.350	475208-01 & CSF	Y
.1800 Enforcement Analytical Method	158.355	475208-01	Y

Subgroup B: Series 830.6302 - 7950 (40 CFR 158.190)

GUIDELINE REFERENCE NO. (GRN)/ TITLE 830	VALUE OR QUALITATIVE DESCRIPTION	MRID Number	Data Fulfilled
.6302 Color	Blue	475206-02	Y
.6303 Physical State	Clear liquid	475206-02	Y
.6304 Odor	Mild odor	475206-02	Y
.6314 Oxidation/Reduction: Chemical Incompatibility	The product does not contain oxidizing or reducing agents.		N/A
.6315 Flammability/Flame Extension	The product does not contain flammable components.		N/A
.6316 Explodability	The product does not contain any components of explosive nature.		N/A
.6317 Storage Stability of Product	The study will not be completed until April 2009.		I
.6319 Miscibility	Not to be diluted with petroleum solvents		N/A
.6320 Corrosion Characteristics	The study will not be completed until April 2009.		I
.7000 pH	2.05 (1% w/w solution) at 25°C	475206-02	Y

.7100 Viscosity	1.650 centistokes at 20°C, 1.051 centistokes at 40°C	475206-02	Y
.7300 Density/Relative Density/ Bulk Density	Density: 1.183 g/ml at 20 ^o C	475206-02	Y

Explanations: Y = Requirement fulfilled; N = Requirement not fulfilled; N/A = Not applicable; G = Data gap; U = Upgradable; I = Incomplete or in progress; W = Waived.

830-1800 Enforcement Analytical Method

The copper content in Magna-Bon Bahama KlearTMAlgicide/Bactericide/Fungicide is determined by Atomic Absorption Spectrophotometric Method (in MRID No. 475208-01). The operation conditions of the atomic absorption spectrophotometer are set as follows: Oxidizing flame burner: air-C₂H₂; Wavelength: 324.7 nm; Range: 2-20 μg/ml. Reagents: 2.5% Disodium EDTA solution, 25 μg/ml Calcium stock solution, 1000 μg/ml Cu stock solution, and 0.5 N HCL. The percent copper is calculated according to the following formula:

Copper (%) = $(\mu g/ml) \times (F/sample wt.) \times 10^{-4}$

F = original dilution (ml) x final dilution (ml)/ ml. aliquot, if original 100 ml vol. is diluted.

GRICULTURAL CONTROL SOLUTIONS

November 4, 2009

Document Processing Desk (DCI/PRD) Veronica Dutch, Chemical Review Manager Product Reregistration Branch Special Review and Reregistration Branch 7508P Office of Pesticide Programs U.S. Environmental Protection Agency (7508P) 1200 Pennsylvania Ave. NW Washington, DC 20460

Dear Ms. Dutch:

RE:

DCI for Copper Sulfate Pentahydrate

Magna-Bon Bahama Klear, EPA Reg. No. 66675-3 Amended Confidential Statement of Formulation

Per our telephone conversation on Tuesday, November 3, 2009, I am enclosing 2 copies of our amended Confidential Statement of Formulation for EPA Reg. No. 66675-3, Magna-Bon Bahama Klear that reflects the correct pH. I hope you it satisfactory.

If you have any other questions, please do not hesitate to contact me.

Sincerely,

Susan Wright

General Manager

Swam Wit

Attachments

CC: file

1531 N.W. 25th Drive - Okeechobee, Fl. 34972 - 863. 357.0400 - 800.84 Fax: 863.357.1083 e-mail: magna1@strato.net

DATE OUT: 13/NOV/09

SUBJECT: PRODUCT CHEMISTRY REVIEW OF: TGAI []; MUP []; EUP [x]

BARCODE NO.: 371144 REG./FILE SYMBOL NO.: 66675-3
PRODUCT NAME: Magna-Bon Bahama KlearTM Algicide/Bactericide/Fungicide

PRODUCT NAME: Magna-Bon Bahama Klear^{1M} Algicide/Bactericide/Fungicide/MRID NO.: 477426-01

COMPANY NAME: Magna-Bon II, LLC ACTION CODE: 675

FROM: Shirley H. Keel, Environmental Protection Specialist

Product Chemistry Team RMIB V/PRD (7508P)

TO: Veronica Dutch, CRM

Risk Management and Implementation Branch V

Pesticide Re-evaluation Division (7508P)

INTRODUCTION:

With this resubmission in response to our review dated 12/08/08, Barcode No. 356261, the registrant provided MRID No. 477426-01 with information pertaining to a one-year storage stability/corrosion characteristics study, and a revised CSF for the basic formulation, dated 11/4/09. The registrant is requesting FIFRA Section 4 reregistration of Magna-Bon Bahama KlearTM Algicide/Bactericide/Fungicide, EPA Reg. No. 66675-3.

FINDINGS:

- 1. EPA Reg. No. 66675-3 is an end-use product that contains the active ingredient Copper Sulfate Pentahydrate at a label claim nominal concentration of 19.8%. The metallic copper equivalent of the product is 5%.
- MRID No. 477426-01 reports the results of a one-year room temperature storage stability/corrosion characteristics study of Magna-Bon Pro-Teck, which is identical to the subject product in chemical composition. Guidelines 830.6317 Storage Stability and 830.6320 Corrosion Characteristics are satisfied.
- 3. The CSF for the basic formulation has been revised as requested. The pH value in the basic CSF, dated 11/4/09, is now consistent with the value reported in MRID No. 475206-02.

CONCLUSIONS:

The revised CSF for the basic formulation, dated 11/4/09, is acceptable and will supersede the previous basic CSF, dated 8/18/08. The registrant has now satisfied the product chemistry data requirements for the reregistration of EPA Reg. No. 66675-3.

Product Chemistry Data
Subgroup B: Series 830.6302 - 7950 (40 CFR §158.310)
Physical and Chemical Properties

Guideline Reference No. (GRN) / Title 830	Value OR	Qualitative D	escription		MRID NO.	Data Fulfilled
.6317 Storage Stability	container a one year (3 during the 27°C. The triplicate for 9, and 12 m and 12-morappearance recorded. Tor cracking	t ambient labor 1/26/08 ~ 3/27/0 storage period itest substance were percent active nonths of storage in the test periods of the product the sample cong or pitting. The sample cong or pitting.	ored in a plastic ratory condition (9). Temperatur ranged from 21' was analyzed in e ingredient at (1) ge. At the 0, 3, (1) t, the physical was observed a tainer was evalu- ne results of tes- ented in the fol	s for re 0°C to 0, 3, 6, 6, 9, and nated	477426-01	Y
	Test Period	% Copper as Metal (Mean)	% Copper Sulfate Pentahydrate (Mean)			
	Initial	5.0	19.6			
	3 Months	5.0	19.6			
	6 Months	5.0	19.6			
	9 Months	5.1	20.1			
	12 Months	4.9	19.2			
	of active in temperature no change	bstance was for gredient after see for one year. in physical appwere observed.				
.6320 Corrosion Characteristics	During the storage period, the container showed no signs of cracking or pitting. No corrosion of the storage container was observed.				477426-01	Y

Explanations: Y = Requirement fulfilled

Section - IV

Title Name Telephone No. (Include Area Code) Susan Wright General Manager 1-800-845-1357

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowlingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature

4. Typed Name

Susan Wright

General Manager

5. Date

8-18-08

6. Date Application

(Stamped)

Received



April 24, 2009

Document Processing Desk (DCI/SRRD)
Veronica Dutch, Chemical Review Manager
Product Reregistration Branch
Special Review and Reregistration Branch 7508P
Office of Pesticide Programs (7508P)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

Dear Ms. Dutch:

Subject:

EPA No. 66675-3 Magna-Bon Bahama Klear

Submission of required data per DCI for Copper Sulfate Storage and Stability and Corrosion Characteristics

OPPTS 830.6317 and 830.6320

In response to the RED for Copper Sulfate, Magna-Bon requested and was granted a time waiver to fulfill requirements OPPTS 830.6317 and 830.6320.

This package contains the three (3) copies of the report. As stated in past correspondence, even though the report states the product is Magna-Bon Pro-Teck, the products are the same.

I hope you find this satisfactory. If you have any questions, please contact me at your earliest convenience.

Sincerely,

Susan Wright General Manager

TRANSMITTAL DOCUMENT

NAME AND ADDRESS OF SUBMITTER:	Magna-Bon II, LLC
	1531 NW 25 th Drive
	Okeechobee, Fl. 34972
REGULATORY ACTION: 8 month respons	se to DCI for RED – Copper Sulfate
TRANSMITTAL DATE: April 24, 2009	
Mrid No. VOLUME 1 Storage	ge Stability and Corrosion
Mrid No.	
VOLUME 3	
COMPANY OFFICIAL: Susan Wright TYPED NAM	Swan Will
COMPANY NAME: MAGNA-BOD	
COMPANY CONTACT: Susan Wright TYPED NAM	800-845-1357 TELEPHONE



April 24, 2009

Document Processing Desk (DCI/SRRD)
Veronica Dutch, Chemical Review Manager
Product Reregistration Branch
Special Review and Reregistration Branch 7508P
Office of Pesticide Programs (7508P)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

Dear Ms. Dutch:

Subject:

EPA No. 66675-3 Magna-Bon Bahama Klear

Submission of required data per DCI for Copper Sulfate Storage and Stability and Corrosion Characteristics

OPPTS 830.6317 and 830.6320

In response to the RED for Copper Sulfate, Magna-Bon requested and was granted a time waiver to fulfill requirements OPPTS 830.6317 and 830.6320.

This package contains the three (3) copies of the report. As stated in past correspondence, even though the report states the product is Magna-Bon Pro-Teck, the products are the same.

I hope you find this satisfactory. If you have any questions, please contact me at your earliest convenience.

Sincerely,

Susan Wright General Manager

TRANSMITTAL DOCUMENT

NAME AND ADDRESS OF SUBMITTER:	Magna-Bon II, LLC
	1531 NW 25 th Drive
	Okeechobee, Fl. 34972
REGULATORY ACTION: 8 month respons	e to DCI for RED – Copper Sulfate
TRANSMITTAL DATE: April 24, 2009	
Mrid No. VOLUME 1 Storag	ge Stability and Corrosion
Mrid No.	
VOLUME 3	
Wild No.	
COMPANY OFFICIAL: Susan Wright TYPED NAM	Stran Will SIGNATURE
COMPANY NAME: MAGNA-BOD	I, LLC
COMPANY CONTACT: Susan Wright TYPED NAM	800-845-1357 E TELEPHONE

Administrative Materials

Mrid NUMBERS

Submission of Mrid Numbers per Requirement Status and Registrant Response Form

The following are the Mrid numbers and Data Requirement Titles being submitted per the 8 month response for the DCI for the RED for Copper Sulfate.

NAME AND ADDRESS OF SUBM	MITTER: MAGNA BON II, LUC
	1531 NW 25th Drive
	Okechober, Fl 34972
Mrid Number:	Data Requirement Number: 830.6317 1830.6320
	Study Title: Strage Stability & Corrosion
Mrid Number:	Data Requirement Number:
	Study Title:
Mrid Number:	Data Requirement Number:
	Study Title:
Mrid Number:	Data Requirement Number:
	Study Title:
COMPANY OFFICIAL: SUSAN W Typed N	
COMPANY NAME: MAGNA-BON	I II, LLC.
COMPANY CONTACT: SUSAN V Typed N	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

January 9, 2009

MEMORANDUM:

Subject:

EPA Reg. No.: 66675-3/Magna-Bon Bahama Klear

DP Barcode: 360615

Case No.: 0636

From:

Marianne Lewis, Biologist

Product Reregistration Branch

Special Review and Reregistration Division (7508C)

To:

Veronica Dutch, CRM

Product Reregistration Branch

Special Review and Reregistration Division (7508C)

Applicant:

Magna-Bon II, LLC

1531 NW 25th Drive Okeechobee, FL 34972

FORMULATION FROM EPA Reg. No. 66675-3 LABEL:

		% by wt.
Active Ingredient(s): Copper sulfate pentahydrate Inert Ingredient(s):		19.8% 80.2%
	Total	100.Q%

BACKGROUND: In the 8 month response to the Coppers RED, the registrant requested waivers for four (81-2, 81-4, 81-5, 81-6) of the acute toxicity studies and is citing an acute inhalation study (81-3) to support the reregistration of their product, EPA Reg. No. 66675-3. The basis for this request is that the pH of the subject product is < 2. The request to waive the four (81-2, 81-4, 81-5, 81-6) studies was granted by PRB/SRRD on 9/15/08. The acute inhalation study (MRID# 475206-03) was conducted by Product Safety Labs. The test material used in the study was EPA Reg. No. 66675-4 which is listed in Batch 4 (PC Code 024401) of the RED along with the subject product. The study was reviewed and found to be acceptable by PRB on 9/15/08.

The registrant is now citing an acute oral study, MRID # 419161-01, which was conducted by Hazleton Laboratories America. The test material used in this study was EPA Reg. No. 61943-1 which is listed in Batch 4 (PC Code 024401) of the RED along with the subject product. This study was reviewed and found to be acceptable by PRS/RD on 6/23/89. After reviewing the study PRB concurs with PRS' findings.

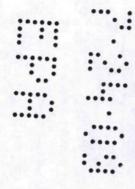
RECOMMENDATIONS:

 The acute oral study (81-1) cited is acceptable to support the reregistration of EPA Reg. No. 66675-3.

The acute toxicity profile for EPA Reg. No. 66675-3 is currently:

Acute Oral	III	Cited $(LD_{so} = 1540 \text{ mg/kg})$
Acute Dermal	I	Waived
Acute Inhalation	IV	Cited
Primary Eye	I	Waived
Primary Dermal	I	Waived
Skin Sensitization	non sensitizer	Waived

NOTE: The acute toxicity study requirements have been satisfied for the subject product.



LABELING:

ID #: 066675-00003

BAHAMA KLEAR

RESTRICTED USE CLASSIFICATION REQUIRED:

Due to acute dermal, primary eye irritation, and primary skin irritation toxicity categories.

CHILD RESISTANT PACKAGING REQUIRED:

Due to acute dermal, primary eye irritation, and primary skin irritation toxicity categories.

SIGNAL WORD:

DANGER

PELIGRO

POISON

(Skull & Crossbones)

HAZARDS TO HUMANS AND DOMESTIC ANIMALS:

Corrosive. Fatal if absorbed through skin. Causes irreversible eye damage. Causes skin burns. Do not get on skin, in eyes, or on clothing. Harmful if swallowed. Wear coveralls over long sleeved shirt and long pants, protective eyewear (goggles, face shield, safety glasses), chemical resistant footwear, socks, and chemical resistant gloves (such as or made out of any waterproof material, selection category A*). When mixing and loading wear a chemical resistant apron. For overhead exposure wear chemical resistant headgear. When cleaning equipment add a chemical resistant apron.

*If Selection Category A gloves do not provide adequate protection for this product, the registrant should indicate a specific glove category from the EPA chemical resistance chart that will provide adequate protection.

FIRST AID:

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information.

USER SAFETY RECOMMENDATIONS:

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

The proposed label must contain the following guidance:

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage.

Note to CRM/PM/Registrant:

The proposed label should contain a Note to Physician which addresses the acute dermal, primary eye irritation, and primary skin irritation Toxicity Category I. The following statements are some suggested types of information that could be included, if applicable, in the Note to Physicians:

- technical information on symptomatology;
- use of supportive treatments to maintain life functions;
- medicine that will counteract the specific physiological effects of the pesticide;
- company telephone number to specific medical personnel who can provide specialized medical advice.



DATE OUT: 13/NOV/09

SUBJECT: PRODUCT CHEMISTRY REVIEW OF: TGAI []; MUP []; EUP [x]

BARCODE NO.: ______371144 _____REG./FILE SYMBOL NO.: 66675-3

PRODUCT NAME: Magna-Bon Bahama Klear MAlgicide/Bactericide/Fungicide

MRID NO.: 477426-01

COMPANY NAME: Magna-Bon II, LLC ACTION CODE: 675

FROM:

Shirley H. Keel, Environmental Protection Specialist

Product Chemistry Team RMIB V/PRD (7508P)

TO:

Veronica Dutch, CRM

Risk Management and Implementation Branch V

Pesticide Re-evaluation Division (7508P)

INTRODUCTION:

With this resubmission in response to our review dated 12/08/08, Barcode No. 356261, the registrant provided MRID No. 477426-01 with information pertaining to a one-year storage stability/corrosion characteristics study, and a revised CSF for the basic formulation, dated 11/4/09. The registrant is requesting FIFRA Section 4 reregistration of Magna-Bon Bahama KlearTM Algicide/Bactericide/Fungicide, EPA Reg. No. 66675-3.

FINDINGS:

- 1. EPA Reg. No. 66675-3 is an end-use product that contains the active ingredient Copper Sulfate Pentahydrate at a label claim nominal concentration of 19.8%. The metallic copper equivalent of the product is 5%.
- MRID No. 477426-01 reports the results of a one-year room temperature storage stability/corrosion characteristics study of Magna-Bon Pro-Teck, which is identical to the subject product in chemical composition. Guidelines 830.6317 Storage Stability and 830.6320 Corrosion Characteristics are satisfied.
- 3. The CSF for the basic formulation has been revised as requested. The pH value in the basic CSF, dated 11/4/09, is now consistent with the value reported in MRID No. 475206-02.

CONCLUSIONS:

The revised CSF for the basic formulation, dated 11/4/09, is acceptable and will supersede the previous basic CSF, dated 8/18/08. The registrant has now satisfied the product chemistry data requirements for the reregistration of EPA Reg. No. 66675-3.

Product Chemistry Data
Subgroup B: Series 830.6302 - 7950 (40 CFR §158.310)
Physical and Chemical Properties

Guideline Reference No. (GRN) / Title 830	Value OR	Qualitative D	MRID NO.	D NO. Data Fulfilled		
.6317 Storage Stability	container a one year (3 during the 27°C. The triplicate for 9, and 12 m and 12-more appearance recorded. Tor cracking	bstance was stot ambient labor /26/08 ~ 3/27/0 storage period test substance was repercent active nonths of storage in the test periods of the product the sample cong or pitting The alyzed are present active and the sample congruence of the sam	477426-01	Y		
	Test Period	% Copper as Metal (Mean)	% Copper Sulfate Pentahydrate (Mean)			
	Initial	5.0	19.6			
	3 Months	5.0	19.6			
	6 Months	5.0	19.6			
	9 Months	5.1	20.1			
	12 Months	4.9	19.2			
	of active in temperature no change i	pstance was for gredient after s e for one year. in physical app were observed.				
.6320 Corrosion Characteristics	no signs of	storage period, cracking or pit container was		477426-01	Y	

Explanations: Y = Requirement fulfilled



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

January 9, 2009

MEMORANDUM:

Subject:

EPA Reg. No.: 66675-3/Magna-Bon Bahama Klear

DP Barcode: 360615

Case No.: 0636

From:

Marianne Lewis, Biologist

Product Reregistration Branch

Special Review and Reregistration Division (7508C)

To:

Veronica Dutch, CRM

Product Reregistration Branch

Special Review and Reregistration Division (7508C)

Applicant:

Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, FL 34972

FORMULATION FROM EPA Reg. No. 66675-3 LABEL:

	% by wt.
Active Ingredient(s):	
Copper sulfate pentahydrate	19.8%
Inert Ingredient(s):	80.2%
Total	100.0%

BACKGROUND: In the 8 month response to the Coppers RED, the registrant requested waivers for four (81-2, 81-4, 81-5, 81-6) of the acute toxicity studies and is citing an acute inhalation study (81-3) to support the reregistration of their product, EPA Reg. No. 66675-3. The basis for this request is that the pH of the subject product is < 2. The request to waive the four (81-2, 81-4, 81-5, 81-6) studies was granted by PRB/SRRD on 9/15/08. The acute inhalation study (MRID# 475206-03) was conducted by Product Safety Labs. The test material used in the study was EPA Reg. No. 66675-4 which is listed in Batch 4 (PC Code 024401) of the RED along with the subject product. The study was reviewed and found to be acceptable by PRB on 9/15/08.

The registrant is now citing an acute oral study, MRID # 419161-01, which was conducted by Hazleton Laboratories America. The test material used in this study was EPA Reg. No. 61943-1 which is listed in Batch 4 (PC Code 024401) of the RED along with the subject product. This study was reviewed and found to be acceptable by PRS/RD on 6/23/89. After reviewing the study PRB concurs with PRS' findings.

RECOMMENDATIONS:

 The acute oral study (81-1) cited is acceptable to support the reregistration of EPA Reg. No. 66675-3.

The acute toxicity profile for EPA Reg. No. 66675-3 is currently:

Acute Oral	III	Cited $(LD_{50} = 1540 \text{ mg/kg})$
Acute Dermal	I	Waived
Acute Inhalation	IV	Cited
Primary Eye	I	Waived
Primary Dermal	I	Waived
Skin Sensitization	non sensitizer	Waived

NOTE: The acute toxicity study requirements have been satisfied for the subject product.

LABELING:

ID #: 066675-00003

BAHAMA KLEAR

RESTRICTED USE CLASSIFICATION REQUIRED:

Due to acute dermal, primary eye irritation, and primary skin irritation toxicity categories.

CHILD RESISTANT PACKAGING REQUIRED:

Due to acute dermal, primary eye irritation, and primary skin irritation toxicity categories.

SIGNAL WORD:

DANGER

PELIGRO

POISON

(Skull & Crossbones)

HAZARDS TO HUMANS AND DOMESTIC ANIMALS:

Corrosive. Fatal if absorbed through skin. Causes irreversible eye damage. Causes skin burns. Do not get on skin, in eyes, or on clothing. Harmful if swallowed. Wear coveralls over long sleeved shirt and long pants, protective eyewear (goggles, face shield, safety glasses), chemical resistant footwear, socks, and chemical resistant gloves (such as or made out of any waterproof material, selection category A*). When mixing and loading wear a chemical resistant apron. For overhead exposure wear chemical resistant headgear. When cleaning equipment add a chemical resistant apron.

FIRST AID:

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

^{*}If Selection Category A gloves do not provide adequate protection for this product, the registrant should indicate a specific glove category from the EPA chemical resistance chart that will provide adequate protection.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information.

USER SAFETY RECOMMENDATIONS:

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

The proposed label must contain the following guidance:

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage.

Note to CRM/PM/Registrant:

The proposed label should contain a Note to Physician which addresses the acute dermal, primary eye irritation, and primary skin irritation Toxicity Category I. The following statements are some suggested types of information that could be included, if applicable, in the Note to Physicians:

- technical information on symptomatology;
- use of supportive treatments to maintain life functions;
- medicine that will counteract the specific physiological effects of the pesticide;
- company telephone number to specific medical personnel who can provide specialized medical advice.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

October 7, 2008

MEMORANDUM:

Subject:

EPA Reg. No.: 66675-3/Magna-Bon Bahama Klear

DP Barcode: 356928

Case No.: 0636

From:

Marianne Lewis, Biologist

Product Reregistration Branch

Special Review and Reregistration Division (7508C)

To:

Veronica Dutch, CRM

Product Reregistration Branch

Special Review and Reregistration Division (7508C)

Applicant:

Magna-Bon II, LLC 1531 NW 25th Drive

Okeechobee, FL 34972

FORMULATION FROM EPA Reg. No. 66675-3 LABEL:

	% Dy WL.
Active Ingredient(s):	
Copper sulfate pentahydrate	19.8%
Inert Ingredient(s):	80.2%
Total	100.0%

BACKGROUND: In the 8 month response to the Coppers RED, the registrant requested waivers for four (81-2, 81-4, 81-5, 81-6) of the acute toxicity studies and is citing an acute inhalation study (81-3) to support the reregistration of their product, EPA Reg. No. 66675-3. The basis for this request is that the pH of the subject product is < 2. The request to waive the four (81-2, 81-4, 81-5, 81-6) studies was granted by PRB/SRRD on 9/15/08. The acute inhalation study (MRID# 475206-03) was conducted by Product Safety Labs. The test material used in the study was EPA Reg. No. 66675-4 which is listed in Batch 4 (PC Code 024401) of the RED along with the subject product. The study was reviewed and found to be acceptable by PRB on 9/15/08.

The registrant is now citing an acute oral study, MRID # 419161-01, which was conducted by Hazleton Laboratories America. The test material used in this study was EPA Reg. No. 61943-1 which is listed in Batch 4 (PC Code 024401) of the RED along with the subject product. This study was reviewed and found to be acceptable by PRS/RD on 6/23/89. After reviewing the study PRB concurs with RD's findings.

RECOMMENDATIONS:

 The acute oral study (81-1) cited is acceptable to support the reregistration of EPA Reg. No. 66675-3.

The acute toxicity profile for EPA Reg. No. 66675-3 is currently:

Acute Oral	III	Cited (LD ₅₀ = 1540 mg/kg)
Acute Dermal	I	Waived
Acute Inhalation	IV	Cited
Primary Eye	I	Waived
Primary Dermal	I	Waived
Skin Sensitization	non sensitizer	Waived

NOTE: The acute toxicity study requirements have been satisfied for the subject product.

LABELING:

ID #: 066675-00003

BAHAMA KLEAR

RESTRICTED USE CLASSIFICATION REQUIRED:

Due to acute dermal, primary eye irritation, and primary skin irritation toxicity categories.

CHILD RESISTANT PACKAGING REQUIRED:

Due to acute dermal, primary eye irritation, and primary skin irritation toxicity categories.

SIGNAL WORD:

DANGER

PELIGRO

HAZARDS TO HUMANS AND DOMESTIC ANIMALS:

Corrosive. Causes irreversible eye damage. Causes skin burns. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear coveralls over long sleeved shirt and long pants, chemical resistant footwear, socks, and chemical resistant gloves (such as or made out of any waterproof material, selection category A*). When mixing and loading wear a chemical resistant apron. For overhead exposure wear chemical resistant headgear. When cleaning equipment add a chemical resistant apron.

*If Selection Category A gloves do not provide adequate protection for this product, the registrant should indicate a specific glove category from the EPA chemical resistance chart that will provide adequate protection.

FIRST AID:

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information.

USER SAFETY RECOMMENDATIONS:

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

The proposed label must contain the following guidance:

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage.

Note to CRM/PM/Registrant:

The proposed label should contain a Note to Physician which addresses the acute dermal, primary eye irritation, and primary skin irritation Toxicity Category I. The following statements are some suggested types of information that could be included, if applicable, in the Note to Physicians:

- technical information on symptomatology;
- use of supportive treatments to maintain life functions;
- medicine that will counteract the specific physiological effects of the pesticide;
- company telephone number to specific medical personnel who can provide specialized medical advice.

DATE OUT: 08/DEC/08

SUBJECT: PRODUCT CHEMISTRY REVIEW OF: TGAI []; MUP []; EUP [x] BARCODE NO.: 356261 REG./FILE SYMBOL NO.: 66675-3

PRODUCT NAME: Magna-Bon Bahama Klear TM Algicide/Bactericide/Fungicide

MRID NOs.: 475208-01, 475206-02

COMPANY NAME: Magna-Bon II, LLC ACTION CODE: 674

FROM:

Shirley H. Keel, Environmental Protection Specialist

Product Chemistry Team [sign. S. Keel, 12/8/08]

PRB/SRRD (7508P)

TO:

Veronica Dutch, CRM

Product Reregistration Branch

Special Review and Reregistration Division (7508P)

INTRODUCTION:

A Reregistration Eligibility Decision (RED) entitled *Coppers*, including Case Nos. 0636, 0649, 4025 and 4026, was issued in July 2006 for the Copper Compounds. This RED included 34 copper compounds of which 13 were indicated as having been cancelled. According to the Coppers RED, the generic database supporting the reregistration of Copper Compounds for their current uses has been reviewed and found to be substantially complete.

In the 8-month response to the Coppers RED, in support of the reregistration of Magna-Bon Bahama KlearTMAlgicide/Bactericide/Fungicide, EPA Reg. No. 66675-3, the registrant submitted a Confidential Statement of Formula (CSF), a basic formulation, dated 8/18/08; a draft label received by EPA on 8/25/08; and product chemistry data in MRID numbers 475208-01 and 475206-02.

FINDINGS:

- 1. EPA Reg. No. 66675-3 is an end-use product that contains the active ingredient Copper Sulfate Pentahydrate at a label claim nominal concentration of 19.8%.
- 2. The CSF for the basic formulation, dated 8/18/08, is not acceptable because the pH value, 0.0-1.0, in the CSF (box 8) does not correspond to the pH value, 2.05, stated in MRID No. 475206-02. Other information in the CSF is acceptable. The nominal concentration of the active ingredient agrees with that on the draft label, meeting the requirements of PR Notice 91-2. The certified limits for the active and inert ingredients are acceptable as per 40 CFR §158.175(b)(2). All ingredients listed in the CSF are cleared for use in pesticide formulations.
- Except for Finding #4, the product chemistry data reported in MRID Nos. 475208-01 and 475206-02 satisfy the requirements of the Guidelines under Subgroups A and B, which pertain to the Product Identity, Composition and Analysis, and Physical and Chemical Properties respectively.

- The one-year Storage Stability and Corrosion Characteristics study is still in progress, and will
 not be completed until April 2009. When the study is completed, PRB/SRRD will review the
 results.
- 5. The product chemistry statements of the draft label are acceptable. The Ingredient statement is in compliance with the requirements of 40 CFR 156.10(g) and PR Notice 91-2. There are no physical/chemical hazards present in the product that will trigger the Physical or Chemical Hazards subheading.
- 6. The Storage and Disposal section of the draft label needs to be revised.
 - The statement "PROHIBITION: Do not contaminate water, food or feed by storage or disposal." should be changed to "Do not contaminate water, food, or feed by storage and disposal." This statement should be placed in the beginning of the section under the STORAGE AND DISPOSAL heading, in accordance with 40 CFR 156.10 and the PR Notice 83-3.
 - The subheading "STORAGE" should be changed to "Pesticide Storage."
 - It is recommended that the Storage and Disposal statements be presented in a text box for increased prominence.

The above recommendations to revise the Storage and Disposal section should be addressed during the label review.

CONCLUSIONS:

Except for Findings #2 and #4, the registrant has satisfied the product chemistry data requirements for the reregistration of EPA Reg. No. 66675-3.

<u>Product Chemistry Data</u> Subgroup A: Series 830.1550 - 830.1800 (40 CFR 158.155 - 158.180)

GUIDELINE REFERENCE NO. (GRN)/ TITLE 830	40 CFR §	MRID Number	Data Fulfilled
.1550 Product Identity and Composition	158.320	475208-01 & CSF	Y
.1600 Description of Materials Used to Produce the Product	158.325	475208-01 (MSDS) & CSF	Y
.1650 Description of Formulation Process	158.335	475208-01	Y
.1670 Discussion of Formation of Impurities	158.340	475208-01	Y
.1750 Certified Limits	158.350	475208-01 & CSF	Y
.1800 Enforcement Analytical Method	158.355	475208-01	Y

Subgroup R. Series 830 6302 - 7950 (40 CFR 158 190)

GUIDELINE REFERENCE NO. (GRN)/ TITLE 830	VALUE OR QUALITATIVE DESCRIPTION	MRID Number	Data Fulfilled
.6302 Color	Blue	475206-02	Y
.6303 Physical State	Clear liquid	475206-02	Y
.6304 Odor	Mild odor	475206-02	Y
.6314 Oxidation/Reduction: Chemical Incompatibility	The product does not contain oxidizing or reducing agents.		N/A
.6315 Flammability/Flame Extension	The product does not contain flammable components.		N/A
.6316 Explodability	The product does not contain any components of explosive nature.		N/A
.6317 Storage Stability of Product	The study will not be completed until April 2009.		I
.6319 Miscibility	Not to be diluted with petroleum solvents		N/A
.6320 Corrosion Characteristics	The study will not be completed until April 2009.		I
.7000 pH	2.05 (1% w/w solution) at 25°C	475206-02	Y

.7100 Viscosity	475206-02	Y	
.7300 Density/Relative Density/ Bulk Density	Density: 1.183 g/ml at 20°C	475206-02	Y

Explanations: Y = Requirement fulfilled; N = Requirement not fulfilled; N/A = Not applicable; G = Data gap; U = Upgradable; I = Incomplete or in progress; W = Waived.

830-1800 Enforcement Analytical Method

The copper content in Magna-Bon Bahama KlearTMAlgicide/Bactericide/Fungicide is determined by Atomic Absorption Spectrophotometric Method (in MRID No. 475208-01). The operation conditions of the atomic absorption spectrophotometer are set as follows: Oxidizing flame burner: air-C₂H₂; Wavelength: 324.7 nm; Range: 2-20 μg/ml. Reagents: 2.5% Disodium EDTA solution, 25 μg/ml Calcium stock solution, 1000 μg/ml Cu stock solution, and 0.5 *N* HCL. The percent copper is calculated according to the following formula:

Copper (%) = $(\mu g/ml) \times (F/sample wt.) \times 10^{-4}$

F = original dilution (ml) x final dilution (ml)/ ml. aliquot, if original 100 ml vol. is diluted.

United States Environmental Protection Agency Washington, D.C. 20460

OMB Approval 2070-0107 OMB Approval 2070-0057

13. Phone Number 800-845-13-20

REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE

INSTRUCTIONS: Please type or print in ink. Please read carefully the attached instructions and supply the information requested on this form. Use additional sheet(s) if necessary.

Signature and Title of Company's Authorized Representative

12. Name of Company MAGNA- BOU II, LLC

1. Company Name a	nd Address	2. Case # and Name 0636 Copper Sulfate EPA Reg. No. 66675-3			3	3. Date and Type of DCI and Number 14-Dec-2007 PRODUCT SPECIFIC ID # PDCI-024401-26856				
MAGNA-BON II 1531 NW 25TH OKEECHOBEE	DRIVE									
4. Guideline Requirement Number	5. Study Title			P Progress O Reports			6. Use Pattern	7. Test Substance	8. Time Frame (Months)	9. Registrant Response
			OL	1	2	3				
	Product Chemistry Data Requirement	ts (Conventional								
830.1550	Product Identity and composition	(1)					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	TGAI/MP/EP	8	1
830.1600	Description of materials used to produc	e the product (2)					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	, TGAI/MP/EP	8	1
830.1620	Description of production process	(3)					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	, TGAI	8	P
830.1650	Description of formulation process	(4)			1		A, B, C, D, E, F, G, H, I J, K, L, M, N, O	, MP/EP	8	1
830.1670	Discussion of formation of impurities	(5)					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	, TGAI/MP/EP	8	1
830.1700	Preliminary analysis	(6, 7, 8)		18			A, B, C, D, E, F, G, H, I J, K, L, M, N, O	, TGAI	8	P
830.1750	Certified limits	(9 ,10)					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	, TGAI/MP/EP	8	1
830.1800	Enforcement analytical method	(11)				M	A, B, C, D, E, F, G, H, I J, K, L, M, N, O	, TGAI/MP/EP	8	1
830.6302	Color	(19)					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	TGAI/MP/EP	8	1
830.6303	Physical state	(22)					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	, TGAI/MP/EP	8	1
830.6304	Odor	(23)					A, B, C, D, E, F, G, H, I J, K, L, M, N, O	TGAI/MP/EP	8	1

United States Environmental Protection Agency Washington, D.C. 20460

OMB Approval 2070-0107 OMB Approval 2070-0057

REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE

INSTRUCTIONS: Please type or print in ink. Please read carefully the attached instructions and supply the information requested on this form. Use additional sheet(s) if necessary.

1. Company Name and Address 2. Case # and Name 3. Date and Type of DCI and Number MAGNA-BON II, LLC 0636 Copper Sulfate 14-Dec-2007 1531 NW 25TH DRIVE PRODUCT SPECIFIC OKEECHOBEE, FL 34972 ID # PDCI-024401-26856 EPA Reg. No. 66675-3 9. Registrant 4. Guideline 6. Use 7. Test 8. Time 5. Study Title Progress Requirement Frame Response Pattern Substance O Reports Number (Months) 2 3 Stability to sunlight, normal and elevated A, B, C, D, E, F, G, H, I, TGAI 830.6313 (12.13)temperatures, metals, and metal ions J. K. L. M. N. O 830 6314 Oxidizing or reducing action (14) A, B, C, D, E, F, G, H, I, MP/EP J. K. L. M. N. O Flammability (15)A, B, C, D, E, F, G, H, I, MP/EP 830.6315 J. K. L. M. N. O A, B, C, D, E, F, G, H, I, MP/EP 830.6316 Explodability (16)J. K. L. M. N. O A, B, C, D, E, F, G, H, I, MP/EP Storage stability of product (17)830.6317 J. K. L. M. N. O Miscibility A. B. C. D. E. F. G. H. I. MP/EP (18)830.6319 J, K, L, M, N, O A, B, C, D, E, F, G, H, I, MP/EP Corrosion characteristics 830.6320 (20)J, K, L, M, N, O A, B, C, D, E, F, G, H, I, MP/EP Dielectric breakdown voltage (21)830.6321 J. K. L. M. N. O A, B, C, D, E, F, G, H, I, TGAI/MP/EP pH of water solutions or suspensions 830.7000 (28, 29)J, K, L, M, N, O A, B, C, D, E, F, G, H, I, TGAI/PAI 830.7050 UV/Visible absorption J. K. L. M. N. O 830.7100 Viscosity (30)A, B, C, D, E, F, G, H, I, MP/EP J, K, L, M, N, O A, B, C, D, E, F, G, H, I, TGAI Melting point/melting range (31, 32)830,7200 J, K, L, M, N, O

Initial to indicate certification as to information on this page (full text of certification is on page one).

United States Environmental Protection Agency Washington, D.C. 20460

OMB Approval 2070-0107 OMB Approval 2070-0057

REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE

INSTRUCTIONS: Please type or print in ink. Please read carefully the attached instructions and supply the information requested on this form. Use additional sheet(s) if necessary.

1. Company Name a	nd Address 2	2. Case # and Na	me	-				3.	Date and Type of DCI and	Number	
MAGNA-BON II 1531 NW 25TH OKEECHOBEE	DRIVE	0636 Coppe							14-Dec-2007 PRODUCT SPECIFIC ID # PDCI-024401-268	356	
Guideline Requirement Number	5. Study Title			PROTOC		gress	6. Use Pattern		7. Test Substance	8. Time Frame (Months)	9. Registrant Response
				O L	1 2	2 3					
830.7220	Boiling point/boiling range	(33 ,3	4)				A, B, C, D, E, F, G J, K, L, M, N, O	, H, I,	TGAI	8	8
830.7300	Density/relative density	(35 ,3	6)				A, B, C, D, E, F, G J, K, L, M, N, O	, H, I,	TGAI/MP/EP	8	1
830.7370	Dissociation constant in water	(24 ,2	5)				A, B, C, D, E, F, G J, K, L, M, N, O	, H, I,	TGAI or PAI	8	8
830.7550	Partition coefficient (n-octanol/water), shake method	ke flask (26)					A, B, C, D, E, F, G J, K, L, M, N, O	, H, I,	TGAI/PAI	8	8
830.7570	Partition coefficient (n-octanol/water), estin	mation by (27)					A, B, C, D, E, F, G J, K, L, M, N, O	, H, I,	TGAI/PAI	8	8
830.7840	Water solubility: Column elution method, s method	shake flask (37)					A, B, C, D, E, F, G J, K, L, M, N, O	, H, I,	TGAI or PAI	8	8
830.7860	Water solubility, generator column method	d (38)					A, B, C, D, E, F, G J, K, L, M, N, O	, H, I,	TGAI or PAI	8	8
830.7950	Vapor pressure	(39 ,4	0)				A, B, C, D, E, F, G J, K, L, M, N, O	, H, I,	TGAI or PAI	8	8
	Toxicology Data Requirements (Conven	ntional Chemical	1								
870.1100	Acute Oral Toxicity	(44)					A, B, C, D, E, F, G J, K, L, M, N, O	, H, I,	TGAI,EP,dilute EP?	8	6
870.1200	Acute dermal toxicity	(41 ,4	2)					, H, I,	TGAI,EP,dilute EP?	8	7
870.1300	Acute inhalation toxicity	(43)					A, B, C, D, E, F, G J, K, L, M, N, O	, Н, І,	TGAI & EP	8	1
Initial to indicate certification	ication as to information on this page is on page one).			П	1				Date 3/12/08		203

United States Environmental Protection

Agency Washington, D.C. 20460

OMB Approval 2070-0107 OMB Approval 2070-0057

REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE

INSTRUCTIONS: Plea Use additional sheet(s)	ise type or print in ink. Please read ca if necessary.	refully the attached instructions and	d supp	ly th	e info	orma	ition requested on this fo	rm.			
1. Company Name and Address MAGNA-BON II, LLC 1531 NW 25TH DRIVE OKEECHOBEE, FL 34972			2. Case # and Name 0636 Copper Sulfate EPA Reg. No. 66675-3						3. Date and Type of DCI and Number 14-Dec-2007 PRODUCT SPECIFIC ID# PDCI-024401-26856		
4. Guideline Requirement Number 5. Study Title			P R O T O C O L		P R Progress Reports 6. Us Patte		6. Use Pattern	7. Test Substance	8. Time Frame (Months)	9. Registrar Response	
870.2400 870.2500 870.2600	Acute eye irritation Acute dermal irritation Skin sensitization	(45) (46,47) (48,49)					A, B, C, D, E, F, G, H J, K, L, M, N, O A, B, C, D, E, F, G, H J, K, L, M, N, O A, B, C, D, E, F, G, H J, K, L, M, N, O	I, I, TGAI & EP	8 8 8	7 9 7	
Initial to indicate certific (full text of certification i	ation as to information on this page is on page one).	8n	11					Date 3/12/0	8	204	



THORNTON LABORATORIES TESTING & INSPECTION SERVICES, INC.

1145 E. Cass St, Tampa, FL 33602 Phone: 813-223-9702 Fax: 813-223-9332 WWW.THORNTONLAB.COM

Attn: Sue Wright

13-Mar-2008 Page 1 of 1

Report For:

Magna-Bon Corporation 1531 NW 25th Drive Okeechobee, FL 34972

Sample Identification:

Copper Solution
Id: Sample #071210-2A

Id: Sample #071210-2A
Date Requested: 3/11/08

Date Received:

12-Mar-2008

Laboratory Number:

312320

CERTIFICATE OF ANALYSIS

Method Parameter Result

NFSA 1980

pH Value 0.61

THORNTON LABORATORIES Steve Fickett, III Date: March 5, 2010

Reg. No.: 66675-3

Product Name: Magna-Bon Bahama Klear (Name of record with the Agency), Bahama

Klear (Name on draft label)

PM Name/Number: AD, Risk Management Team 33

Primary Reviewer: Judy Loranger

Secondary Reviewer: Mark Perry

MIR Lorange 3/25/10 New label or date of RD amended label: New, Received on 8/25/08

Formulation Type: Liquid

Active Ingredient Assessed: Copper sulfate pentahydrate/024401

Other ai's in product

Name/PC code:

Reregistration Status or Registration Date:

N/A

Note to PM:

N/A

- 1) The Risk Management and Implementation Branch V (RMIB V) notes that the last stamped accepted label approved on 2/14/06 allowed use on raw agricultural commodities but only applied as a post-harvest wash. Since the submitted label appears to contain expended (new) uses to field crops and greenhouse and shadehouse use, RMIB V will not comment on the acceptability or rate restrictions for these new uses. RMIB V defers to AD regarding this issue. This assessment will provide comments for the product's use on swimming pools, outdoor hot tubs and spas and as a post harvest use was on agricultural commodities only.
- 2) If only uses listed on the last accepted label are considered, no uses fall within the scope of WPS. The Agricultural Use Requirements and the Non-Agricultural Use Requirements boxes should be deleted from the label. The required entry and application restriction text must read:
- "Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Do not enter or allow others to enter until sprays have dried."

3) Per the acute toxicity review, child resistant packaging is triggered for this product.

Assessment can be found N:\prb\label\066675/003

1) This product has been classified as a Restricted Use Pesticide due to acute dermal toxicity, and eye and skin irritation. Add the following text to the top of the front panel of the label, preferably enclosed in a box:

Restricted Use Pesticide

Due to acute dermal toxicity and eye and skin irritation.

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

The above text must be set in type of the same minimum size as required for human hazard signal words and appear with sufficient prominence relative to the other text and graphic material on the front panel to make it unlikely to be overlooked under customary conditions of purchase and use.

- 2) Add "Restricted Use Pesticide" immediately below the heading "Directions For Use".
- 3) The signal word section must be revised to read:

"DANGER

PELIGRO

POISON

[Insert Skull and Crossbones symbol]

4) Based on toxicity ranking per the acute toxicity review, the First Aid statements should be placed on the label in the following order:

"IF ON SKIN OR CLOTHING:...
IF IN EYES:...
IF SWALLOWED:...
IF INHALED:.."

5) A Note to Physician must be added to the label and must read:

"Note to Physician

Probable mucosal damage may contraindicate the use of gastric lavage."

The Agency recommends that additional text be added to the Note to Physician that addresses acute dermal toxicity and eye and skin irritation concerns.

6) Per the acute toxicity review, the Hazards to Humans and Domestic Animals must be revised to read:

"DANGER

Corrosive. Fatal if absorbed through skin. Causes irreversible eye damage. Causes skin burns. Do not get on skin, in eyes, or on clothing. Harmful if swallowed. Wear coveralls over long-sleeved shirt and long pants, goggle or faceshield, chemical-resistant footwear plus socks, chemical-resistant gloves made of any waterproof material, chemical-resistant apron for mixing, loading, and cleaning equipment, and chemical-resistant headgear for overhead exposure."

7) User Safety Requirements text must be added to the label:

"Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry."

"Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them."

8) User Safety Recommendations must be added to the label and placed in a box:

"User Safety Recommendations

User should wash hands before, eating, drinking, chewing gum, using tobacco, or using the toilet.

User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing."

9) The Environmental Hazards text currently on the label must be revised to read as specified below and any duplicate or conflicting text elsewhere on the label must be deleted:

"This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate."

The text "Do not discharge effluent containing this product...For guidance contact your State Water Board or Regional Office of the EPA" may also remain in this section of the label.

- 10) Per the product chemistry review, revisions are needed to the storage and disposal section.
- 11) If spray drift text is needed for this product, the following should be added to the label:

"Spray Drift Management

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and the method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluated all factors and make appropriate adjustments when applying this product.

Droplet Size

Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition (approximately 3 to 10 mph), and there are no sensitive areas within 250 feet downwind.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of copper compounds. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

For aerial application:

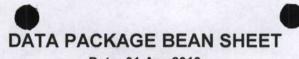
The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

For groundboom application:

Do not apply with a nozzle height greater than 4 feet above the crop canopy."



Date: 01-Apr-2010 Page 1 of 1 Decision #: 384848

DP #: (376073)

NON PRIA

Parent DP #: Submission #:

* * * Registration Information * * *

Registration:	66675-3 - MAGN	A-BON BAHAMA KL	EAR	
Company:	66675 - MAGNA-BON	N II, LLC		
Risk Manager:	RM 33 - Marshall Swi	ndell - (703) 308-6341 Ro	om# PY1 S-8828	
sk Manager Reviewer:	Veronica Dutch VDU	тсн		
Sent Date:		Calculated Due	Date:	Edited Due Date:
Type of Registration:	Product Registration -	- Section 3		
Action Desc:				
Ingredients:	024401, Copper sulfa	te pentahydrate(19.8%)		
	*	* * Data Package	Information	* * *
Expedite:	○ Yes ● No	Date	Sent: 01-Apr-2010	Due Back:
DP Ingredient:	024401, Copper sulfa	te pentahydrate		
DP Title:	Final Registration Cor	oper Sulfate Reg# 66675-		
CSF Included:	● Yes ○ No	Label Included: Y	es O No Par	ent DP #:
Assigned To		Date In	Date Out	
Organization: AD / R	MB1			Last Possible Science Due Date: 13-Oct-2007
Team Name:				Science Due Date:
eviewer Name:				Sub Data Package Due Date:
ntractor Name:				
	***	Studies Sent fo	r Review * * *	
		No Studies		

* * * Additional Data Package for this Decision * * *

No Additional Data Packages

* * * Data Package Instructions * * *

Recommended for completed reregistration for Copper Compounds RED. Please close out this data package after your final review of the label. All reviews, CSF and label are included. Should you have any questions, please Veronica Dutch at 703-308-8585. Thank you.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

January 9, 2009

MEMORANDUM:

Subject:

EPA Reg. No.: 66675-3/Magna-Bon Bahama Klear

DP Barcode: 360615 Case No.: 0636

From:

Marianne Lewis, Biologist

Product Reregistration Branch

Special Review and Reregistration Division (7508C)

To:

Veronica Dutch, CRM

Product Reregistration Branch

Special Review and Reregistration Division (7508C)

Applicant:

Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, FL 34972

FORMULATION FROM EPA Reg. No. 66675-3 LABEL:

	% by wt.
Active Ingredient(s):	
Copper sulfate pentahydrate	19.8%
Inert Ingredient(s):	80.2%
Total	100.0%

BACKGROUND: In the 8 month response to the Coppers RED, the registrant requested waivers for four (81-2, 81-4, 81-5, 81-6) of the acute toxicity studies and is citing an acute inhalation study (81-3) to support the reregistration of their product, EPA Reg. No. 66675-3. The basis for this request is that the pH of the subject product is < 2. The request to waive the four (81-2, 81-4, 81-5, 81-6) studies was granted by PRB/SRRD on 9/15/08. The acute inhalation study (MRID# 475206-03) was conducted by Product Safety Labs. The test material used in the study was EPA Reg. No. 66675-4 which is listed in Batch 4 (PC Code 024401) of the RED along with the subject product. The study was reviewed and found to be acceptable by PRB on 9/15/08.

The registrant is now citing an acute oral study, MRID # 419161-01, which was conducted by Hazleton Laboratories America. The test material used in this study was EPA Reg. No. 61943-1 which is listed in Batch 4 (PC Code 024401) of the RED along with the subject product. This study was reviewed and found to be acceptable by PRS/RD on 6/23/89. After reviewing the study PRB concurs with PRS' findings.

RECOMMENDATIONS:

 The acute oral study (81-1) cited is acceptable to support the reregistration of EPA Reg. No. 66675-3.

The acute toxicity profile for EPA Reg. No. 66675-3 is currently:

Acute Oral	III	Cited $(LD_{50} = 1540 \text{ mg/kg})$
Acute Dermal	I	Waived
Acute Inhalation	IV	Cited
Primary Eye	I	Waived
Primary Dermal	I	Waived
Skin Sensitization	non sensitizer	Waived

NOTE: The acute toxicity study requirements have been satisfied for the subject product.

LABELING:

ID #: 066675-00003

BAHAMA KLEAR

RESTRICTED USE CLASSIFICATION REQUIRED:

Due to acute dermal, primary eye irritation, and primary skin irritation toxicity categories.

CHILD RESISTANT PACKAGING REQUIRED:

Due to acute dermal, primary eye irritation, and primary skin irritation toxicity categories.

SIGNAL WORD:

DANGER

PELIGRO

POISON

(Skull & Crossbones)

HAZARDS TO HUMANS AND DOMESTIC ANIMALS:

Corrosive. Fatal if absorbed through skin. Causes irreversible eye damage. Causes skin burns. Do not get on skin, in eyes, or on clothing. Harmful if swallowed. Wear coveralls over long sleeved shirt and long pants, protective eyewear (goggles, face shield, safety glasses), chemical resistant footwear, socks, and chemical resistant gloves (such as or made out of any waterproof material, selection category A*). When mixing and loading wear a chemical resistant apron. For overhead exposure wear chemical resistant headgear. When cleaning equipment add a chemical resistant apron.

*If Selection Category A gloves do not provide adequate protection for this product, the registrant should indicate a specific glove category from the EPA chemical resistance chart that will provide adequate protection.

FIRST AID:

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information.

USER SAFETY RECOMMENDATIONS:

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

The proposed label must contain the following guidance:

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage.

Note to CRM/PM/Registrant:

The proposed label should contain a Note to Physician which addresses the acute dermal, primary eye irritation, and primary skin irritation Toxicity Category I. The following statements are some suggested types of information that could be included, if applicable, in the Note to Physicians:

- technical information on symptomatology;
- use of supportive treatments to maintain life functions;
- medicine that will counteract the specific physiological effects of the pesticide;
- company telephone number to specific medical personnel who can provide specialized medical advice.



WASHINGTON, D.C. 20460

1/A/2/1

October 23, 2007

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

OPP Decision Number: D-384848

EPA File Symbol or Registration Number: 66675-3 Product Name: MAGNA-BON BAHAMA KLEAR

EPA Application Receipt Date: 03-Oct-2007 EPA Waiver Request Receipt Date: 03-Oct-2007

EPA Company Number: 66675

Company Name: MAGNA-BON II, LLC

SUSAN WRIGHT MAGNA-BON II, LLC 1531 NW 25TH DRIVE OKEECHOBEE, FL 34972

SUBJECT: Approval of Waiver Request

Dear Registrant:

The Office of Pesticide Programs has approved your request for 75% waiver of the pesticide registration fee associated with the action referenced above. The decision review period for this action will begin on the date of this letter.

The Action has been identified as Action Code: A470

NEW USE; WITH TOLERANCE; NEW FOOD USE;

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman, at (703) 308-6432.

Sincerely,

Oscar Morales, Director

Information Resources and Services Division

MATERIAL TO BE ADDED TO JACKET

che	ck all that apply	Tai ka
	new stamped accepted label	Sen
	new CSF	Send to
风	notification	CSC
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

July 22, 2008

Magna-Bon® Agricultural Control Solutions 1531 N.W. 25th Drive Okeechobee, FL 34972

ATTN:

Susan Wright

Subject:

Magna-Bon Bahama Klear

EPA Reg. No. 66675-3

Notification of Final Printed Label

The submitted final printed labels have been placed in your product file. In accordance with PR Notice 82-2 the labels have not been reviewed.

If you have any questions concerning this letter, please contact Marshall Swindell at (703) 308-6341.

Sincerely yours, Marshall Swinstell

Marshall Swindell Product Manager 33

Regulatory Management Branch 1 Antimicrobials Division (75IOP)



April 2, 2008

DOCUMENT PROCESSING DESK (NOTIF-FINAL LABELS)

Marshall Swindell
Product Manager Team 33
Regulatory Management Branch I
Antimicrobial Division (7504P)
Office of Pesticide Programs
United States Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave NW
Washington, DC 20460

Dear Mr. Swindell:

Subject:

Magna-Bon Bahama Klear EPA Reg. No. 66675-3

Response to Letter written February 9, 2008

3 copies corrected Final labels

Per your letter dated February 9, 2008, the changes requested in the letter have be incorporated into Magna-Bon Bahama Klear label and we are submitting the three copies required per the letter before we sell or distribute any product. I hope you find this satisfactory.

If you have any questions, please contact me at your earliest convenience.

Sincerely,

Susan Wright

General Manager

Swam With

Attachment

1531 N.W. 25th Drive - Okeechobee, FL 34972 - (863) 357-0400 - (800) 845-1357 FAX (863) 357-1083 E-Mail: magna1@strato.net



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON D.C., 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

John Kennedy c/o for Magna –Bon Agricultural Control Solutions 101 Beach Side Stevensville, MD 21666

Attention: John Kennedy Regulatory Specialist

FEB S & &

Subject:

Magna-Bon

EPA Reg. No. 66675-3

Amendment Dated October 1, 2007

The following amendment, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable pending that the following changes are incorporated:

- On page, in footnote #1, the statement should be reworded to state the following: "The language in parenthesis is only required on the bulk containers, not on retail containers..."
- On page 3, under the section Application, each time before the word "bacteria", the
 wording "odor causing" needs to be incorporated. Data has not been submitted to
 support this product as bactericide in swimming pools.. The word "bacteria" as used in
 this context, is broad and gives the impression that this product is efficacious against a
 variety of bacterium.
- Per the Copper Reregistration Eligibility Decision (RED) based on worker risks, the Agency recommends that you incorporate the required worker restricted entry interval (REI) of 48 hours instead of your current 24 hour restriction. EPA anticipates that this change will be mandatory soon for all product specific registrations that contain copper.
- On page 10, above the table, after the title "AMOUNT OF BAHAMA KLEAR PER VOLUME...", in parenthesis add the wording "(as Copper)".
- On page 10, after the table that is titled "AMOUNT OF BAHAMA KLEAR PER
 VOLUME..." you list an asterisk that states "ppm=parts per million". After the asterisk,
 add the wording "of copper".

 On pages 11-23, for each listing of crops, the following information should be incorporated for each commodity:

> -Maximum annual load of copper (lbs Cu/A) per growing season -Minimum reentry interval

 On pages 11-23, in each column that is titled "ppm's per 100 gallons of water" after the abbreviation "ppm's" add in parenthesis the word "copper".

On pages 11-23, in each column that is titled "ppm's (copper) per 100 gallons of water" the rates listed (for all commodities) are incorrect. For example, alfalfa has a rate of copper per 100 gallons of water as 75 – 125 ppm. The Agency calculates this rate 35-55 ppm. Please recalculate each crop to correspond to the correct ppm value.

Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) and section 4(a) when the Agency requires all registrants of similar products to submit such data.

If the above conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the accepted labeling is enclosed. Submit three copies of your final printed labeling to the Agency before distributing or selling the product bearing the revised labeling.

If you have any questions concerning this letter, please contact Demson Fuller at (703) 308-8062.

Sincerely,

Marshall Swindell Product Manager (33)

Regulatory Management Branch 1

Antimicrobials Division (7510C)

Form Approv	OMB No. 2070-0060,	Approval expires 2-28-9
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	Registration Amendment Other
	Amendment
1	Other

OPP Identifier Number

⇔EPA	Environmental Protection Agency Weshington, DC 20460							ment		
		Application	n for Pe	estici	de - Sec	tion	1			
1. Company/Product Numb 66675-3	er				Product Man all Swinde				Proposed CI	assification Restricted
	4. Company/Product (Name) Magna-Bon Bahama Klear			PM# # 33					Hone	Nestricted
5. Name and Address of A Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, Fl. 349 Check if th	ode)	1	6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(i), my product is similar or identical in composition and label to: EPA Reg. No. Product Name							
			Section	on -	I	9175				
Amendment - Explai Resubmission in res Notification - Explai Explanation: Use addition	sponse to Agency letter				Final printe Agency lett "Me Too" / Other - Exp	ter date Applica	ed ition.	se to F	eb.9, 20	08
			Section	on - I	1					
1. Material This Product W	ill Be Packaged In:		Occin	JII - I						
Child-Resistant Packaging Yes No * Certification must be submitted Unit Packaging Yes Vocation No. per container		No. per . container	Y			ı,	2. Type o	Metal Plastic Glass Paper		
3. Location of Net Contents	s Information Container	4. Size(s) Ret 2.5,		ntainer , 55, 275 gallon		111		of Label Directions		
6. Manner in Which Label i	s Affixed to Product	Lithog Paper Stenci	raph glued iled		Othe	r				
			Section	on - l'	V					
1. Contact Point (Complet	e items directly below	for identificatio	n of individu	ual to b	e contacted,	if nec	essary, to p	rocess th	is application	n.)
Name Susan Wright			Title General N	Manage	er			Telepho		lude Area Code)
	ements I have made on my knowlinglly false or a law.		all attachm				mprisonme		Recei	Application ved tamped)
2. Signature	AMM		3. Title General Ma	anager						
4. Typed Name Susan Wright			5. Date	Apr	il 2, 2008	3				

For Swimming Pools, Outdoor Hot Tubs and Spas and for use on Raw Agricultural Commodities

Copper Sulfate Pentahydrate* (CAS 7758-99-8)
Other Ingredients

100%

*Equivalent to 5.0% metallic copper A Chelated Copper Product

KEEP OUT OF THE REACH OF CHILDREN DANGER

19.8%

f Inhaled	Hold eyes open and rinse slowly and gently with water for 15-20 minutes.
	Remove contacts lenses, if present, after the first 5 minutes, then continue rinsing.
	Call a Poison Control Center or Doctor for treatment advice.
f Swallowed	Cell a Poison Control Center or Doctor invinediately for treatment advice.
	Have a person sip a glass of water if able to do so.
	Do not induce vorniting unless told to do so by a Poison Control Center or Doctor.
	Do not give anything to an unconscious person.
f Inhaled	Move person to fresh air.
	If person is not breathing, call 911 or an ambulance, and give artificial respiration, preferably mouth-to-mouth, if possible.
	Call a Poison Control Center or Doctor for further treatment.
f on Skin	Take off contaminated clothing.
	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a Poison Control Center or Doctor for treatment advice.

EPA Est No. 66675-F1-001 EPA REG. NO. 66675-3

Net Contents: U.S. Gallons U.S. Ounces

STORAGE AND DISPOSAL

Prohibition: Do not contaminate water, food, or feed by storage or disposal.

Storage: Store in a safe place away from PET AND KEEP OUT OF THE REACH OF CHILDREN. Store away from excessive heat. Magna-Bon BAHAMA KLEAR will freeze. Always keep container closed. Store Magna-Bon BAHAMA KLEAR in its original container only. Bulk Magna-Bon BAHAMA KLEAR shall be stored and handled in 318L stainless steel, fiberglase, PVC's, polypropylenes or plastic container. Keep away from gavanized pipe and any nyrion storage handling equipment. Pesticide Disposal: Excess Magna-Bon BAHAMA KLEAR should be disposed of through label use. Do not containinate lakes, rivers or streams as this may cause flak kill. Pesticide Disposal: Excess Magna-Bon BAHAMA KLEAR should be disposed of through label use. Do not containinate lakes, rivers or streams as this may cause flak kill. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray motive or risaste is a violation of Federal law. If these wastes can not be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waster representative at the nearest EPA Regional Office for guidance. In the event of a split, neutralize with timestone or baking sode before disposal. Concentrate may deteriorate concrete.

Container Disposal: Do not reuse empty containers. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill. Or by other approved State and local procedures. Rinsing and reuse of 'tootes' is permissible.

PRECAUTIONARY STATEMENTS

Danger: Corroselve: Causes irreversible eye damage and skin irritation. Do not get into eyes or on clothing. Wear goggles or safety glasses. Harmful if swallowed, inhaled or absorbed through the skin. May cause allergic skin response. Avoid contact with skin. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

The pesticide is toxic to fish. Do not discharge effluent containi

or Regional Office of the EPA.

For Terrestrial Uses: This pesticide is toxic to fish and aquatic organisms. Do not apply directly to water or areas where surface water is present or to intertidal areas below the mean high mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

GENERAL INFORMATION

Magna-Bon BAHAMA KLEAR is a copper is a copper sulfate pentahydrate formulation used to control bacteria and eligae in swimming pools and outdoor hot tubs and spas. It is used as a post harvest wash to control bacteria and fungi that cause spoilage in fruits and vegetables and is used and growing agricultural commodities to control bacteria

DIRECTIONS FOR USE

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Application:

For control of algae and odor causing bacteria in swimming pools, outdoor hot tubs and spes, add Magna-Bon Bahama Klear as per chart below.

Water 15,000 gallon 30,000 gallon 60,000 gallon Magna-Bon Bahama Klear 235 gallon 470 gallon

Application should be made before visible algae appear. Where visible algae is present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive build up of metallic copper. Magna-Bon Bahama (Kear may be used at the higher rates to help control odors and algae during the winter months while the pool is not being used. Recommended application rates yield (1 ppm to 3 ppm) metallic copper.

To control algae and bacteris in swimming pools, spas & hot tubs: Apply at the rate of 2 - 4 quarts of Magna-Bon Bahama Klear per 60,000 gallons. This will provide a level of 0.5 ppm to 1.0 ppm metallic copper. Application should be made before visible algae appear. Where visible algae are present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid successive buildup of metallic copper. Magna-Bon Bahama Klear may be used to help control pool odors and algae during winter months. Maintain the higher rate while the pool is not being used during the winter. Do not discharge treated pool effluent where it will crain into lakes, streams, ponds, or public water.

General Algae/Bacteria Control

For suppression of bacterial control

For suppression of bacterial coders and for control of algae, apply in late spring or early summer when algae and bacteria first appear. The dosages are variable and depend upon an algae/bacteria species, water hardness, water temperature, amount of algae/bacteria present, as well as whether water is clear, turbid, flowing or static. Preferably, the water should be clear with the temperature above 60°F or 15.6°C. Higher dosages are required at lower temperatures, higher algae/bacteria concentration, and for hard waters. Application should be done by pouring Magna-Bon Bahama Klear directly from the container into the pool, outdoor hot tub or spa. Several application points speed up dispersal. Static water requires less chemical for algae/bacteria control than does flowing water. Use higher dosages for Chara, Nitella and filamentous algae (pond sount) and lower dosages for planktonic algae. If there is uncertainty about the dosage, begin with a lower dose and increase until control is schieved, or until the maximum allowable level has hear packed.

For Use as a Post Harvest Wash an Agricultural Commodities: To use as an algicide, bactericide, fungicide post harvest wash the following directions apply.

For use as a post harvest wash, this product may be applied with any type of application equipment that gives thorough and uniform coverage. Devices may include, but are not limited to, dunk and dip tanks, spray applicators or fogging.

Washing raw agricultural commodities will both clean and control bacteria and fungi that cause spoilage. Depending on water quality and cleaning conditions, or when adding new processing water, add from one hundred three (103) up to one hundred twenty eight (128) fluid cunces of Magna-Bon Bahama Kear per one thousand (1,000) gallons of water. Allow thorough coverage of the commodity and then led Gry. Risning is not required or recommended.

Depending on water quality, cleaning conditions or when adding new processing water, start at lower rinse rates. Add Baharna Klear as per the chart below

BAHAMA KI FAR 25.6 ounces to 32 ounces 51.2 ounces to 64 ounces 103 ounces to 128 ounces

RINSE WATER

Remember: Commodities need only be immersed long enough to allow complete coverage.

FOR USE AS A FUNSICIDE/BACTERICIDE ON GROWING AGRICULTURAL COMMODITIES: For use as a systemic fungicide/bactericide on growing agricultural commodities, the following directions apply.

Bahama Klear may be applied with any type of application equipment that gives uniform coverage of all foliage, including ground, serial and low volume sprayers as specified on this label. Equipment used for application should be PVC or 310L stanless steel. Bahama River is competible with most fungal and insecticidal biopesticides when applied at least two (2) days before or after application of the biopesticide. Phytotoxicity - Although Bahama River is been tested on wide variety of fruits, vegetables and nuts without phytotoxicity, there could be some varieties and cultivars that because of environmental factors and stages of growth could possibly foster systems. The per acre use ref Bahama River is could be some varieties and cultivars that because of environmental factors and stages of growth could possibly foster systems. The per acre use ref Bahama River is could be some varieties and cultivars that equipment used and the specific crop, the spray volume applied they are reventing the performance from Bahama River. When treating by serial application or with low volume application experience, it is advisable to test for competibility and tolerance to crop injury prior to full scale commercial utilization.

Consult Bahama River label for specific rates and triving of application by crop. Where application rates and intervals are provided in a range (e.g., 2-4 fluid ounces and 7 to 10 days) the higher rates and shorter spray time intervals are recommended when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops. The use of a surfactant, such as Cell-U-Wett²⁴ is acceptable for plants having way or hairy surfaces. Bahama River works via surface contact with the plants and naterials being treated. It is important to ensure that all surfaces are thoroughly wetted. Bahama River does not produce any visible residue or have a distinct odor, it does have a residual, especially if applied with a surfactant.



BAHAMA KLEAR



Do not mix with pot ash.
It must be determined in the selection process if proper application equipment is available and if the waste associated with its use can be properly handled. Metarials used on the construction of application equipment is also assistant analysis and a selection of application equipment is also assistant analysis are often reactive with soft metals such as aluminum and even some synthetic materials such as plastics, rubbers, etc. Trisefeor the improvement with equipment containing these materials, that they are thoroughly flushed with clean water after each days use.

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Protective Equipment: Some materials that are chemical-resistant to the product age itself below.

Long sternord shirt.

Personal Partective Equipment: Some materials that are chemical-resistant to this product as itself below.

licators and other handlers must wear:

Long sleeved shirt.

Protective eyewear

Long parts

Shees plus socks

Chemical resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene,

viton. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE securately from other laundry.

User Safety Recommendations

Users should: Wash hands before eating, drinking, chewing gurn, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Workers Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Workers Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants soil, water, is . coveralls, protective evewear, chemical resistant gloves, and shoes plus socks

The requirements in this box apply to uses of this product that are not within the scope of the Workers Protection Standard for agricultural pesticides, 40 CFR part 170. The WP'S applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. <u>Do not allow re-entry into treated areas until sprays have dried.</u>

GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: Sprinkler including center pivot, lateral move, end row, side (wheel) roll, traveler, big gun, solid set or hand move: flood (basin); furrow, border or drip (trickle) irrigation and system(s). Do not apply this product through any other type of irrigation systems.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety device for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Posting areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor carreps, businesses, day carre centers, hospitals, in-pastent clinics, nursing homes or any public areas such as schools, parks, playgrounds or other public facilities not including public roads, or 2) when chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters of at least 21/2 inches tall, and all letters and the symbol shall be in a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION MATER.

This sign is in addition to any sign posted to comply with the Workers Protection Standard.

CHEMICATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

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CHEMICATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. There sheek (air gap) between the flow outlet end of the fill pipe and the top of the overflow rim of the reservoir trank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fligid back toward the injection. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from the must contain functional prevent the flow of fligid back toward the injection. The pesticide injection being whiterware from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional profits to automatically what from the supply tank when the irrigation system is suffered to the system interlock to prevent fluid from being whiterware from the supply tank when the irrigation system is suffered to the point where the pesticide distribution is adversely effected. Systems must use a metering pump, such as a positive displacement injection pump (in clashyramp pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when with speed favors drift beyond the area intended for treatment. When mining, agitation is not necessary, Algust t

SPRINKLER CHEMIOATION

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. The pesticide injection pipeline must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline of prevent water source contamination from back flow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interfock to prevent fluid from being withdrawn from the supply tank when the irrigations is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement pump (i.e., disphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when wind speed favors diff beyond the area intended for treatment. When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the BAHAMA KLEAR last. If compatibility is in question, use a compatibility is rests before mixing a system of a wide variety of possible combinations which on be encountered, observe all cautions and limitations on the label of all products used in the mixtures. May be added through a traveling irrigation system

FLOOR (BASIN), FURROW AND BORDER CHEMIGATION

Systems using a gravity flow posticide dispensing system must meter the posticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination back flow.

 The pesticide injection pipeline must also contain a functional, automatic, quick-closing check valve to prevent the flow of liquid back toward the injection pump.

 The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interiock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut
- connected to are system matrixen by person and down.

 The system must contain functional interiorising controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

 Systems must use a metring pump, such as a positive displacement pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interiock.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the BAHAMA KLEAR list. If compatibility is in question, use a compatibility are test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the labels of all products used on the mixtures. BAHAMA KLEAR may be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. BAHAMA KLEAR readily disperses and needs no agitation.

DRIP (TRICK) EL CHEMIGATION

DRIP (TRICKLE) CHEMICATION

The Jean Contain a functional check valve, vacuum relief valve and low pressure drain appropria

sted on the irrigation pipeline to prevent water source

contamination from back flow. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of liquid back toward the

injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and

connected to the system intendock to prevent fluid from being withdrawn from the supply tank when the initiation system is either automatically or manually shut down. The

system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pressure decreases to the point where pesticide distribution is adversely

affected. Systems must use a metering pump such as a positive displacement injection pump (i.e. disphragm pump) affectively designed and constructed of materials that are

compatible with pesticides and capabile of being fitted with a system interlock.

When mixing, agitation is not necessary, Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc, add the BAHAMA KLEAR last.

If compatibility is in question, use a compatibility are test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all

functions and finitiations on the label of all products used in the mixtures. BAHAMA KLEAR may be added through a travelling irrigation system continuously or at the last 30 of

solid set or hand moved irrigation systems. BAHAMA KLEAR readily disperses and needs no agitation.

FOR SPRAY AND SOIL DRENCH APPLICATIONS

FOR SPRAY AND SOIL DRENCH APPLICATIONS

Always spray for total foliage coverage. When re-spraying the rates and severity of the disease vary with uniforeseen conditions. However, in the event of severe disease, spraying intervals can be shortened to 3 to 5 days. At times, lower rates can be as effective as higher rates and should be tried first. Usually, preventive programs may be maintained at lower rates. Use of low volume spraying is effective against Botytis and not effective against established powdery mildew and Xanthomonas infections. Also, applications on actively growing tissue may be more effective them applications on domant tissue.

MINIMUM RECOMMENDED SPRAY VOLUME (GALLONS) PER ACRE WHEN APPLYING BAHAMA KLEAR

			SKOOIND
CROP	P AERIAL DILUT		CONCENTRATE
Vegetables	3	20	30
Field Crops	3	20	30
Small Fruits	5	150	30
Vines	5	150	30
Tree Crops	10	400	50
Citrus	10	125	30

cide application equipment such as Curtec® or other similar sprayers which are capable of obtaining coverage at low volumes may be used at as low as 20 gpa of spray a. The following specific instructions are based on general application procedures. The recommendations of the State Extension Service should be closely followed as to frequency and numbers of sprays per season.

FROST INJURY PROTECTION

Application of BAHAMA KLEAR made to all crops listed on this label, at rates and stages of growth indicated on this label, at least 24 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria (<u>Pieudomonas syringae</u>, <u>Envinia herbicols and Pieudomonas flourescens</u>) and may therefore provide some protection against light frost. Not recommended for those geographical areas where weather conditions favor severe frost.

The chart below is used to calculate correct ppms* of active ingredient (A.1) per volume of carrier water. These volumes can be used for either conventional or

AMOUNT OF BAHAMA KLEAR PER VOLUME OF WATER

FOR PROPER PPM'S* OF APPLIED ACTIVE INGREDIENT (as Copper)								
ppm's* of A. I.	30 gallons per acre	50 gallons per Acre	100 gallons per Acre	125 gallons per Acre	250 gallons per Acre	500 gallons per Acre		
50	3.85	6.4 oz.	12.8 oz.	16 oz.	32 oz.	64 oz.		
75	5.78	9.6 oz.	19.2 oz.	24 oz.	48 oz.	96 oz.		
100	7.70 oz.	12.8 oz.	25.6 oz.	32. oz.	64 oz.	1 al.		
125	9.6 oz.	1 6 oz.	32 oz.	40 oz.	80 oz.	1.25 al.		
150	11.5 oz.	19.2 oz.	38.4 oz.	48 oz.	96 oz.	1.5 al.		
200	15.4 oz.	25.6 oz.	51.2 oz.	64 oz.	1 gal.	2 al.		
250	19.2 oz.	32 oz.	64 oz.	8 0 oz.	1.25 gal.	2.5 gal.		

* ppm = parts per million (of Copper)

Disease	Rate per Acre	ppm's (copper) per 100 gallons	of water	Instructions
Brown Rot	30-70 oz.	120-275 ppm		Apply at first indication of rain or first appearance of Brown Rot. Re-apply as needed during wet season.
Greasy Spot, Pink Pitting	25.6-64 oz.	100-250 ppm		Apply during mid-summer.
Scab	25.6-64 oz.	100-250 ppm		Apply shortly before trees begin to flush. Re-apply at 2/3 petal fall. Re-apply 4 weeks later, if necessary.
Melanose	25.6-64 oz.	100-250 ppm		Apply 2 times per year before the onset of spring and autumn rains.
Canker (Suppression)	12.8-64 oz.	50-250 ppm		Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require additional applications. Number and timing of applications will be dependent on disease pressure. Under heavy pressure, each new flush of growth should be sprayed. Heavily infected trees should be sprayed with a minimum dosage of 250 ppm with a follow up seray in 7-14 days at 200ppm.

**Maximum Annual Load of copper applied per growing season (lb Cu²+/A)*

		1	Field Crops	
Сгор	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Alfaifa	Cercospora Leaf Spot, Leptosphserulina Leaf Spot	19.2-32 oz.	75-125 ppm	Apply 10 to 14 days before each harvest or earlier if disease threatens. NOTE: Spray injury may occur with sensitive varieties such as Lahontan.
Corn (Field Corn Popoarn, Sweet corn)	Bacterial Stalk Rot	19.2-32 oz.	75-125 ppm	Begin treatment when disease first appears and repeat every 7 to 10 days or as needed. Use the higher rates and shorter spray intervals when conditions favor disease.
Peanut	Cercospora leaf Spot	19.2-25.6 oz.	75-100 ppm	Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14 day intervals or as needed. Reduce sprays to 7 day intervals during humid weather. Use the higher rates when conditions favor disease.
Potato	Early Blight, Late Blight	19.2-32 oz.	75-125 ppm	Apply 75 to 125 ppm at 7 to 10 day intervals or as needed starting when plants are 2 to 6 inches high in locations where disease is light. Add up to 32 oz. per acre when disease is more severe.
Sugar Beets	Cercospora Leaf Spot	19.2-38.4 oz.	75-150 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use higher rates when conditions favor disease. Addition of a sticker/spreader is recommended.
Wheat, Barley, Oats	Helminthosporium Spot Blotch, Septoria Leaf Blotch	19.2-25.6 oz	75-100 ppm	Make First application at early heading and follow with second spray 10 days later. Use the higher rates when conditions favor disease.

Crop	Small Fruits Disease	re	Ppm's (copper) per	Instructions
Сгор	Disease	210	100 gallons water	maductions
Blackberry Aurora, Boysen, Cascade.	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dormani- spray after pruning/training in the spring. If needed, agricultural-type spray oil may be added.
Ascade, Chehalem, Jogan, Marion, Santiam, Thorniess)	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	Low 19.2 oz	75 ppm	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certail environmental conditions such as hot or prolonged mois periods. Discontinue applications if signs of crop injury appear.
1	Bacterial Canker	33-51 oz.	125-200 ppm	Make application before fall rains and a second application of weeks later Use the higher when conditions favor disease.
Blueberry	Fruit Rot, Phomopsis Twig Blight	25.6-51.2 oz.	100-200 ppm	Dormant Application: Begin applications when bloom buding begin to swell. Make additional applications at 10 to 14 depintervals or as needed before blooms open.
	Fruit Rot	51.2 oz.	200 ppm	Make application in late bloom. Apply one or two additional applications at 10 to 14 day intervals or as needed depending on disease severity.
Cranberry	Rose Bloom	51.2 oz.	200 ppm	Apply three sprays on 10 to 14 day schedule or as needed as soon as symptoms are observed.
	Bacterial Stem Canker	51.2 oz.	200 ppm	Apply post harvest and again in spring at bud swell. Apply one or two additional applications at 10 to 14 intervals or at needed depending on disease severity.
	Leaf Blight, Red Leaf Spot, Stern Blight, Tip Blight (Monillnia)	51.2 oz.	200 ppm	Apply delayed dormant spray in the spring. Repeat at 10 to 1 day intervals or as needed through pre-bloom.
Currant, Gooseberry	Anthracnose, Leaf Spot	64 oz.	250 ppm	Make Initial application after first leaves have expanded Continue on a 10 to 14 day schedule or as needed during we conditions in the spring. Make an additional application after harvest.
Raspberry	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dorman spray after training in the spring. If needed, agricultural-type spray oil may be added.
	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	Low 19.2 oz.	75 ppm	Apply when leaf buds begin to open and repeat when flow buds show white. If needed, agricultural-type spray oil may bladded. NOTE: Crop injury may occur if applied to foliage under certal environmental conditions such as hot or prolonged mois periods. Discontinue applications if signs of crop injury appear
Strawberry	Angular Leaf Spot (Xanthomonas), Leaf Blight, Leaf Scorch, Leaf Spot	19.2-25.6 oz	75-100 ppm	Begin application when plants are established and continue o a weekly schedule throughout the season. Apply in at least 2 gallons of water. Use the higher rates when conditions favo disease. NOTE: Discontinue applications if signs of crop injury appear.

**8.19 lbs

		**Maximum	Annual Load of cop	oper applied per growing season. (lb Cu²+/A)² Vines
Grape	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	19.2-32 oz.	75-125 ppm	Begin applications at bud break with subsequent applications throughout the season depending on disease severity. Use the higher rates when conditions favor disease. NOTE: Foliage injury may occur on copper sensitive varieties such as Concord,
		**20.0 lb.		Delaware, Niegara and Rosette.
Hops	Downy Mildew	19.2 oz.	75 ppm	Make crown treatments after pruning, but before training. After Training, additional treatments are needed at about 10 day intervals. NOTE: Discontinue use two weeks before harvest.
Kiwi	Erwinia herbicola, Psaudomonas flourescens, Psaudomonas syrinsae	38.4 oz.	150 ppm	Apply in 200 gallons of water per acre. Make applications on a monthly basis. A maximum of three applications may be made.

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Atemoya	Anthracnose	25.6-38.4 oz. **12.6 lb.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Carambola	Anthracnose	38.4-64 oz.	150-200 ppm	Make initial application before flowering and repeat on a weekly schedule until just before hervest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Chives	Downy Mildew	19.2 oz.	75 ppm	Begin application when plants are established in the field. Repeat every 7 to 10 days or as needed depending on disease conditions.
Dill	Phoma Leaf Spot, Rhizoctonia Foliage Blight	19.2-25.6 oz. **3.95 lb.	76-100 ppm	Begin applications when plants are first established in the field and repeat at 7-10 day intervals or as needed depending on disease severity and environmental conditions. Use the higher rates for severe disease.
Guava	Anthracnose, Red Algae	25.6-38.4 oz	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Litchi	Anthracnose	25.6-38.4 oz.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Use the higher rates for severe disease.
Macadamia	Anthracnose	38.4-64 oz.	150-250 ppm	Initiate sprays at first sign of flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea)	38.4 – 64 oz.	150-250 ppm	Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease?
Marney Sapote	Algal Leaf Spot	38.4-64oz.	150-250 ppm	Apply when conditions favor disease development. Repeat on a 14 to 30 schedule or as needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease.

Crop	Disease	Rate/Acre	Pprn's (copper) per 100 gallons	Instructions
Almond, Apricot.	Bacterial Blast (Pseudomonas),	51.2-64 oz.	of water 200-250	Make first application before fall rains and a second at late domant. Use the higher rates when conditions fevor disease. If needed, agricultural-type spray oil may be added.
Cherry, Plum, Prune	Bacterial Canker, Coryneum Blight (Shot Hole)		ppm	For Cherries: Where disease is severe, an additional application shortly after harvest may be required. NOTE: Foliar injury may occur from post-bloom sprays on almonds, especially on NePlu
	Blossom Brown Rot, Coryneum Blight (Shot Hole)	51.2-64 oz. on almon€, All others ● 60-90 oz.●	200-250 ppm	Apply Buring early bloom. Do not apply after full bloom or injury may occur. Use the higher rate when rail fall is hearly and disease pressure is high.
	Black Knot* (Plum)	32-84 oz.	124-250 ppm	Mark application at bud swell up to early bloom for early disease suppression. Apply before fu bloom Use to the lighter rates wither rainfall is fleavy and disease pressure is high. NOTE: To avoid plant illury, do not use after full bloom.
	Cherry Leaf Spot* (Sour Cherries Only)	38.4-84 oz.	150-250 ppm	Apply at petal fail as well as 1 to 2 times after petal fall. Use the lower rates where diseas infection is light and use the higher rates for a dormant application or where disease infection is moderate to heavy. Do not apply to sweet cherry or the English Morello variety as severe injury will result. NoTe: Medical to severe injury such as leaf spotting and defoliation may occur from possiblooss passications.
Apple	Anthracnose, Biossom Blast, European Canker (Necris), Shoot Blast	**18.0 lb. 51.2-84 oz.	200-250 ppm	Apply before a rains. Use the higher rates when conditions favor disease. NOSE: Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.
	(Pseudomonas) Apple Scab, Fire Blight	High 51.2-64 az.	200-250 ppm	Make application between silver-tip and green-tip. Apply as a full cover spray for early seasor disease suppression. NOTE: Moderate to severe crop injury may occur from late application; discontinue use when
	Apple Scab	Low	75-125	green-tip reaches ½ inch. Extended spray schedule where fruit finish is not a concern: Continued applications may be
	Fire Blight	19.2-32 oz. Low 19.2-32 oz.	75-100 ppm	made at 5 to 7 day intervals or as needed between ½ inch green-tip and first cover spray. NOTE: Moderate to severe crop injury may result from this extended spray schedule. It is not intended for freah market apples or for apples where fruit finish is a concern as it is likely to cause fruit russetting.
	Collar Rot, Crown Rot	32 oz.	125 ppm	Mix 100 gallons of water. Apply 4 gallons of solution as a drench on the lower trunk area of each tree. Apply in early spring or in fall after harvest for beast results. Do not apply to foliage or fruit.
Avocado	Anthracnose, Blotch, Scab	**16.0 lb. 51.2-64 oz.	200-250 ppm	Apply when bloom buds begin to swell and continue application at monthly intervals for five to st applications. Use the higher rates when conditions favor disease.
Banana	Sigatoka (Black and Yellow)	** 18.9 lb. 19.2 oz.	75 ppm	Apply by air in 3 gallons of water. If needed, agricultural-type spray oil may be added. Apply on 14 day schedule or as needed throughout the wet season. Apply at 21 day intervals or as needed during dry periods.
	Black Pitting	32 oz.	125 ppm	Mix 100 gallions of water. Apply to the fruit stem and the basal portion of the leaf crown. Appl during the first and second weeks after fruit emergence.
Cacao	Black Pod	19.2-64 oz. **15.75 lb.	75-250 ppm	Begin applications at the start of the rainy season and continue while infection conditions persist.
Coffee	Coffee Berry Disease (Callectotrichum coffeanum)	38.4-64 oz.	150-250 ppm	Apply first spray after flowering and before onset of long rains and then at 21 to 28 day interval or as needed until picking. Use the higher rates when conditions favor disease.
	Bacterial Blight (Pseudomonas syringae)	38.4-64 oz.	150-250 ppm	Begin spray program before the onset of long rainy periods and continue throughout the rainy season at 14 to 21 day intervals or as needed. The critical time for spraying to control disease is just before, during and after flowering(s), especially when coinciding with wet weather. Use the higher rates when rainfall is heavy and disease pressure is high.
	Leaf Rust (Hemileia vastatrix)	19.2-32 oz.	75 ppm	Apply before the onset of rain and then at 21 day intervals or as needed while the rains continue. Use the higher rates when rainfall is heavy and disease pressure is high.
	Iron Spot (Cercospora coffeicola), Pink Disease (Corticium	19.2 oz.	75 ppm	Use concentrate or dilute spray. Begin treatment at the start of wet season and continue a monthly intervals for three applications.
Filbert	salmonicolor) Bacterial Blight	64-128 oz.	250-500 ppm	Apply as a post hervest spray. In seasons of heavy rainfall, apply a second spray when thre fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and diseas pressure is high. If needed, agricultural-type spray oil may be added.
Mango	Anthracnose	**24.0 lb. 38.4-64 oz.	150-250	Apply monthly after fruit set until harvest. Use the higher rates when rainfall is heavy and disease
Olive	Olive Knot, Peacock Spot	**18.2 lb. 64-76.8 oz.	250-300 ppm	pressure is high. Make first application before winter rains begin. A second application in early spring should b made if disease is severe. Apply the higher rates for heavy disease pressure or when condition favor disease development.
Peach, Nectarine	Bacterial Blast (Pseudomonas), Bacterial Canker, Bacterial Spot (Xanthomonas), Coryneum Blight	**6.3 lb. 51.2-76.8 oz. **18.0 lb.	200-300 ppm	Make first application before fall rains and a second at late dormant. For peach leaf ourt, lat dormant application must be made before leaf buds swell. Use the higher rates when rainfall and disease pressure is high. If needed, agricultural-type spray oil may be added.
	(Shot Hole), Leaf Curl Blossom Brown Rot, Coryneum	51.2-76.8 oz.	200-300 ppm	Full cover spray at pink bud. Use the higher rates when conditions favor disease.
	Blight (Shot Hole), Leaf Curl Bacterial Spot	19.2oz.	75 ppm	Post-bloom application applied at first and second cover sprays.
	5-5-	**18.8 lb.		NOTE: Do not spray 3 weeks prior to harvest. Use only recommended rates. Spotting of leave and defoliation may occur from use in cover sprays.
Peer	Fire Blight Blossom Blast	19.2 oz.	75 ppm	Apply 5 day intervals or as needed throughout the bloom period. NOTE: Russetting may occur in copper sensitive varieties, Excessive dosages may cause frurusset on any variety.
Pecan	(Pseudomones) Kernel Rot, Shuck	51.2-76.8 oz. **16.0 lb. 19.2-32 oz.	200-300 ppm 75-125	Apply before fall rains and again during dormancy before spring growth starts. Use the higher rates when disease pressure is high or when conditions fleavor disease development. For suppression, another to see the control of the c
recall	Kernel Rot, Shuck Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella pyramidalis)	19.2-32 02	75-125 ppm	For suppression, apply in sufficient water to ensure complete spray coverage at 2 to 4 wee intervision or as needed, starting at kernel growth and continue until shucks open. Use the highe rates and shorter spray intervals if frequent rainfall occurs.
	Ball Moss, Spanish Moss	38.4-64 cz.	150-250 ppm	Apply in 100 gallons of water in the spring when ball moss is actively growing, using 1 ½ gallon of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. The addition of non-lonic surfactant will improve control. A second application may be required after 12 months.
Pistachio	Botryosphaeria Panicle and Shoot Blight, Botytris Blight, Late Blight (Alternaria atternata), Septoria Leaf Blight	**8.4 lb. 32-64 oz.	125-250 ppm	Make initial application at bud swell and repeat on a 14 to 26 day schedule or as needed, disease conditions are severe, use the higher rates and shorter spray intervals.
Quince	Fire Blight	**8.4 lb. 19.2 oz.	75 ppm	Apply at 5 day intervals or as needed throughout the bloom period. Apply in adequate water fr
Welnut	Walnut Blight	**16.0 lb. 38.4-64 oz.	150-250 ppm	Apply at 6 very intervee as as invested an object, the booth period. Apply at first spray at early pre-bloom prior to or when catkins are partially expanded. Mak additional applications during bloom and early nutter tage or as needed when frequent rainfait extended periods of moisture occur. Thorough coverage of catkins, leaves and nutters is essential for effective control. NOTE: Adequate control may not be obtained when copper tolerant species of Xanthomone.

Bean (Dry, Green) Beat (Table Beet, Beet Greens) Beet (Table Beet, Beet Greens) Carrot Alternaria Li Spot, Carcospora Spot Carrot Carrot	e Rate/		pm's (copper) er 100 gallons of water	Instructions	
Greens) Spot Carrot Alternaria Lispot, Cercospora Spot Spot, Cercospora Spot Bacterial Bil Carcospora Early Bilght, Septoria Lat Bilght Brussel Sprouts, Calbade, Cauliflower, Collard Greens, Tumip Greens) Cucurbits (Cantaloupe, Cucurbits (Cantaloupe, Cucurbits (Cantaloupe, Cucurbits, Honeydew, Midew, Watermelon) Cucurbits (Cantaloupe, Cucurbits, Canthernaria Les Spot, Angul Mushmelon, Pumpinin, Squash, Watermelon) Cucurbits (Cantaloupe, Cucurbits, Canthernaria Les Spot, Angul Mushmelon, Pumpinin, Squash, Watermelon) Cucurbits (Cantaloupe, Cucurbits, Canthernaria Les Spot, Angul Mushmelon, Pumpinin, Squash, Watermelon) Cucurbits (Cantaloupe, Cucurbits, Canthernaria Les Spot, Angul Mushmelon, Cartific Les Spot, Angul Mushmelon, Pumpinin Les Spot, Angul Mushmelon, Pumpinin Les Spot, Leaf Spot, Pod Powdery Mid Pumpinin Les Spot, Leaf Spot, Leaf Spot, Pod Powdery Mid Pumpinin Les Mushmelon, Powdery Mid Pumpinin Mushmelon, Powder, Powdery Mid Pumpinin Mushmelon, Powder, Powd	light,		75-100 ppm	For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14 day schedule or as needed depending on environmental conditions. Use the higher rates for more severe disease.	
Celery, Celeriac Calery, Celeriac Carcospora Spot Carcospora Spot Carcospora Spot Carcospora Early Blight Early Blight Carcospora Early Blight Carcospora Early Blight Carcospora Early Blight Early Blight Carcospora Early Blight Carcospora Early Blight Carcospora (Alternia Las (Anternia) Early		2 oz.	75-125 ppm	Begin applications when conditions first favor disease develop and repeat at 10 to 14 day intervals or as needed. Use the higher when conditions favor disease.	
Ceilery, Celeriac Ceilery, Celeriac Cerospora Early Blight, Cerospora Early Blight, Septoria Lat Blight Brussel Sprouts, Cabbage, Cauliflower, Collard Greens, Turnip Greens) Cucurbits (Cantaloupe, Cucurber, Honeydew, Muskmelon, Pumpin, Squash, Watermelon) Eggplant Alternia Lea Spot, Angula Leaf Spot, Angula Leaf Spot, Anthracnos Anthracnos Cowny Mildew, Watermelon Bacterial Fr. Blotch (suppression) Eggplant Alternaria B Alternaria B Anthracnos Anthracnos Cowny Mildew, Watermelon Bacterial Fr. Blotch (suppression) Eggplant Alternaria B Anthracnos Bacterial Spot, Leaf Spot, Powdery Mildew, Watermelon Bacterial Spot, Leaf Spot, Leaf Spot, Powdery Mildew, Watermelon Bacterial Spot, Leaf Spot, Powdery Mildew, Watermelon Bacterial Spot, Powde	_eaf 19.2	OZ.	75 ppm	when conditions raivor disease. Begin applications when disease first threatens and repeat at 7 to day intervals or as needed depending on disease severity.	
Brussel Sprouts, Cathernia, E Abernia, E Rot (Alternia), E Rot (Xanthomon Downey Mili Documbts (Cantaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon) Eggplant Athernia Eas Bight, Pow Milidew, Watermelon Bacterial Fr Blotch (suppression) Okra Anthracnos Bacterial Fr Blotch (pumple) Onion, Garlic Bacterial Fr Spots, Pod Powdery Milidew, Powder,	light, 19.2 a t.	02	75 ppm	Begin applications as soon as plants are first established in the field repeating at 5 to 7 day intervals or as needed depending on disease severity and environmental conditions.	
Cucumber, Honeydew, Muskemein, Pumpin, Squash, Watermelon) Squash, Watermelon) Eggplant Eggplant Eggplant Alternaria B. Anthracnos Bacterial Er Spots, Pod Powdery Mildew Onion, Garlic Domy Milde Alternaria B. Anthracnos Bacterial Er Spots, Pod Powdery Mildew Pepper Anthracnos Bacterial Er Spots, Pod Powdery Mildew Powdery Mildew Domy Milde Prese Powdery Mildew Anthracnos Bacterial Spots, Pod Powdery Mildew Powdery Mildew Papper Anthracnos Bacterial Spots, Vitale Mildew Anthracnos Spot Spinach Anthracnos Spot Anthracnos Spot Anthracnos Spot Spinach Anthracnos Spot Anthracnos Spot Anthracnos Spot Bue Mold, Cercospora Spot Tomato Anthracnos Bacterial Sp Bacte	Spot 19.2 – 2 Black	25.6 oz.	75 – 100 ppm	Begin application after transplants are set in the field, or shortly after emergence of the field seeded crops or when conditions favor disease development. Apply at 7 to 10 intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage.	
Eggplant Alternaria B Alternaria B Anthranonas Phomopsis. Okra Anthranonas Bacterial Le Spot, Leaf P Spots, Pod Powdery Mild Purple Bioto Purple Bioto Purple Bioto Powdery Mild Papper Anthranona Bacterial Sp Cercospora Spot White Tomato Anthranona Biue Mold, Cercospora Spot, White Tomato Bacterial Sp Bacterial Sp Bacterial Sp Early Bilght, Gray Leaf M Late Bilght, Gray Leaf M Late Bilght, Leaf Bilght, Le	af 19.2-25 dar se, dew, em kdery n **5.2	5.6 oz.	75-100 ppm	Begin applications prior to disease development and continue while conditions are favorable for disease development. Repeat at 5 to 7 day intervisio or as needed. Use the higher rates when conditions favor disease. NOTE: Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.	
Okra Anthracnos Bacterial Le Spot, Leaf Spots, Pod Powdery Mi Bacterial Bi Downly Mild Purple Blotc Powdery Mi Bacterial Bi Downly Mild Purple Blotc Powdery Mi Papper Anthracnos Bacterial Sp Cercospora Spot Anthracnos Blue Mold, Cercospora Spot White Sp Bacterial Sp Early Bight Gray Leaf Mild Gray Leaf Mild Gray Leaf Mild Gray Leaf Mild Bight Gray Leaf Mild Bight Gray Leaf Mild Ede Bight Gray Leaf Mild Bight Leaf B	Blight, 19.2 se,		75 ppm	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals or as needed depending on disease severity.	
Onion, Garlic Bacterial Bil Downy Mills Purple Blotz Powdery Mills Purple Blotz Powdery Mills Pepper Anthracnos Bacterial Sp. Cercospora Spot. Splinach Anthracnos Blue Mold, Cercospora Spot. Cercospora Spot. White Tornato Anthracnos Bacterial Sp. Bacterial Sp. Bacterial Sp. Bacterial Sp. Early Billshill, Gray Leaf M. Late Bilght, Care Late Bilght.	se, 19.2-3 eaf		75 ppm	Begin treatment when disease first threatens and repeat every 5 to 10 days or as needed depending on disease severity. Use the higher rates and shorter spray intervals when conditions favor disease.	
Pea Powdery Mi Pepper Anthracnos Bacterial Sp. Cercospora Spot Anthracnos Blue Mold, Cercospora Spot, White Tornato Anthracnos Bacterial Sp. Bacterial Sp. Early Blight Gray Leaf M. Late Blight,	light, 19.2 dew,	OZ.	75 ppm	Begin when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals or as needed depending on disease severity. Can cause phytotoxicity to leaves.	
Bacterial Sr Cercospora Spot Anthracnos Blue Mold, Cercospora Spot, White Tornato Anthracnos Bacterial Sr Bacterial Sr Early Blight Gray Leaf M Late Blight		5.6 oz.	75-100 ppm	Begin applications when disease symptoms first appear and repeat weekly intervals or as needed. Use the higher rates when conditions favor disease.	
Spinach Anthracnos Blue Mold, Carcospora Spot, White Tornato Anthracnos Bacterial Sp Bacterial Sp Early Blight Gray Leaf M Late Blight,	se, 13-25 pot,	5 oz.	50-100 ppm	Begin applications when conditions first favor disease developmen and repeat at 7 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.	
Bacterial Sp Bacterial Sp Early Blight Gray Leaf M Late Blight	a Leaf		75-100 ppm	Begin application when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals or as needed Use the higher rates when conditions favor disease. NOTE: Flecking may occur on spinach leaves.	
Spot Spot	peck, pot, t, Mold,		75-125 ppm	Begin applications when disease first threatens and repeat at 5 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.	
Watercress Cercospora Leaf Spot		oz.	75 ppm	Begin applications when plants are first established in the field repeating at 7 to 14 day intervals or as needed depending on diseases severity. Do not exceed four applications per crop. Apply using ground spray equi	

LIMITED WARRANTY AND LIMITATION OF REMEDIES

Selier warrants that the product conforms to the chemical description and is reasonably fit for the purpose stated on the label for use under normal conditions, but makes no other warranties of FITNESS or MERCHANTABILITY expressed or implied, or any other warranty if the product is used contrary to the label instructions or under abnormal conditions not foreseeable to the seller. In no case shall the seller be liable for more than the cost of the product to the buyer, and will in no event be liable for any consequential, special or indirect damages connected with the use or handling of this product. This product is offered and the buyer or user accepts it's subject to the foregoing terms which may not be varied

FOR EMERGENCY ASSISTANCE CALL

CHEMTREC - 1-800-424-9300

Manufactured by:

MAGNA-BON II, LLC. 1531 N.W. 25th Drive Okeechobee, Fl. 34972 863-357-0400

H Inhaled

If on Skin

HOT LINE NUMBE

EPA REG. NO. 66675-3

For Swimming Pools, Outdoor Hot Tubs and Spas and for use on Raw Agricultural Commodities

Ingredients Copper Sulfate Pentahydrate* (CAS 7758-99-8)
Other Ingredients

100% *Equivalent to 5.0% metallic copper A Chelated Copper Product

. Hold eyes open and rinse slowly and gently with water for 15-20 minutes.

Call a Poison Control Center or Doctor for treatment advice. Have a person sip a glass of water if able to do so.

. Call a Poison Control Center or Doctor for further treatment

Rinse skin immediately with plenty of water for 15-20 minutes
 Call a Poison Control Center or Doctor for treatment advice.

. Do not give anything to an unconscious person.

Take off contaminated clothing.

. Remove contacts lenses. If present, after the first 5 minutes, then continue rinsing.

Do not induce vomiting unless told to do so by a Poison Control Center or Doctor

If person is not breathing, call 911 or an ambulance, and give artificial respiration, preferably mouth-to-mouth, if possible

Net Contents: U.S. Gallons U.S. Ounces

Have the product container or label with you when calling a Poison Control Center or Doctor or going for treatment. You may also contact 1-800-4243-9300 (Chemitrec) for emergency medical treatment.



BAHAMA KLEAR Algaecide/Bactericide/Fungicide

Algaecide/Bactericide/Fungicide

SPECIAL PRECAUTIONS

Do not risk with acidic compounds such as Alliette ** within 14 days before or after application of same.

This gooduct may be reactive or masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces.

Do not spray on cars, houses, lawn furniture, etc.

Environmental conditions such as extended periods of wet weather, acid rain, etc., which after the pH of the leaf surface may effect the performance of BAHAMA KLEAR resulting in possible phytocoxicity or loss of effectiveness.

Do not mix with pot ash.

It must be determined in the selection process if proper application equipment is evaluable and if the waste associated with its use can be properly handled. Mater

Do not mix with port ash. It must be determined in the selection process if proper application equipment is available and if the waste associated with its use can be properly handled. Materials used on the construction of application equipment is also an important factor as agricultural chemicals are often reactive with soft metals such as aluminum and even some synthetic materials such as plastics, hubbers, etc. Therefore it is necessary when working with equipment containing these materials, that they are thoroughly flushed with clean water after each days use.

al Protective Equipment: Some materials that are chemical-re-

at Protective Edulpmentors and other handlers
Long sleeved shirt
Protective eyewear
Long pants
Shoes plus socks

... ..

onces plus socks

Chemical resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene,

polyvinylchioride o

viton. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPI
separately from other laundry.

User Safety Recommendations

Users should: Wash hands before esting, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Use this product only in accordance with its labeling and with the Workers Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Workers Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under Worker Protection Standard and that Involves contact with anything that has been treated, such as plants ralls, protective evewear, chemical resistant gloves, and shoes plus socks

9.9 lbs. per U.S. gallons STORAGE AND DISPOSAL

KEEP OUT OF THE REACH OF CHILDREN

DANGER

9.9 lbs. per U.S. gallons
STORAGE AND DISPOSAL
STORAGE AND S or Regional Office of the EPA.

For Terrestrial Uses: This peaticide is toxic to fish and aquatic organisms. Do not apply directly to water or areas where surface water is present or to intertidal areas below the mean high mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

GENERAL INFORMATION

Magna-Bon BAHAMA KLEAR is a copper is a copper sulfate pentahydrate formulation used to control bacteria and algae in swimming pools and outdoor hot tubs and sees. It is used as a post harvest wash to control bacteria and fungi that cause spoilage in fruits and vegetables and is used and growing agricultural commodities to control bacteria

DIRECTIONS FOR USE

EPA Fet No 68875-FI -001

DIRECTIONS FOR USE.

It is a violation of Federal law to use this product in a manner inconsistent with its lebeling.

Application:

For control of algae and odor causing bacteria in swimming pools, suddoor hot bubs and spes, add Magna-Bon Bahama Klear as per chart below.

Water 15,000 gallon 30,000 gallon 60,000 gallon Magna-Bon Bahama Klear 2-6 quarts 4-12 quarts 235 gallon

Application should be made before visible algae appear. Where visible algae is present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive build up of metallic copper. Magna-Bon Bahama (Kear may be used at the higher rates to help control odors and algae during the winter months while the pool is not being used. Recommended application rates yield (1 ppm to 3 ppm) metallic copper.

To control signe and bacteria in swimming pools, spas & hot tubs: Apply at the rate of 2 - 4 quarts of Magna-Bon Bahama Klear per 60,000 gallons. This will provide a level of 0.5 ppm to 1.0 ppm metallic copper. Application should be made before visible algae appear, Where visible algae are present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid accessive buildup of metallic copper. Magna-Bon Bahama Klear may be used to help control pool odors and eligae during winter months. Maintain the higher rate while the pool is not being used during the writter. Do not discharge treated pool effluent where it will drain into lakes, streams, ponds, or public.

General Algae/Bacteria Control

General Algae/Bacteria Control
For suppression of bacterial doors and for control of algae, apply in late spring or early summer when algae and bacteria first appear. The dosages are variable and depend
upon algae/bacteria species, water hardness, water temperature, amount of algae/bacteria present, as well as whether water is clear, turbid, flowing or static. Preferably, the
water should be clear with the temperature above 60°F or 15°C. Higher dosages are required at lower temperatures, higher algae/bacteria concentration, and for hard waters.
Application should be done by pouring Magna-Bon Bahama Klear directly from the container into the pool, outdoor hot tub or spa. Several application points speed up dispersal.
Static water requires less chemical for aligne/bacteria control than does flowing water. Use higher dosages for Chars, Nitella and filamentous algae
dosages for planistonic algae. If there is uncertainty about the dosage, begin with a lower dose and increase untill control is achieved, or until the maximum allowable level has

For Use as a Post Harvest Wash an Agricultural Commodities: To use as an algicide, bactericide, fungicide post harvest wash the following directions apply.

For use as a post harvest wash, this product may be applied with any type of application equipment that gives thorough and uniform coverage. Devices may include, but are not limited to, dust, and dip tents, spray applicators or fogging.

Washing raw agricultural commodities will both clean and control bacteria and fungi that cause spoilage. Depending on water quality and cleaning conditions, or when adding new processing water, add from one hundred three (103) up to one hundred there(128) fluid ounces of Magna-Bon Bahama Klear per one thousand (1,000) gallons of water. Allow thorough coverage of the commodity and then led by. Rinsing is not required or recommended.

Depending on water quality, cleaning conditions or when adding new processing water, start at lower rinse rates. Add Bahama Klear as per the chart below

BAHAMA KLEAR RINSE WATER

Remember: Commodities need only be immersed long enough to allow complete coverage. FOR USE AS A FUNSICIDEIBACTERICIDE ON GROWING AGRICULTURAL COMMODITIES: For use as a systemic fungicide/bactericide on growing agricultural commodities, the following directions apply.

COMMODITIES. For use as a systemic fungicide/bactericide on growing agricultural COMMODITIES. For use as a systemic fungicide/bactericide on growing agricultural CENERAL INSTRUCTIONS

Bahama Klear may be applied with any type of application equipment that gives uniform coverage of all foliage, including ground, serial and low volume sprayers as specified on this label. Equipment used for application should be PVC or 316L stainless steel. Bahama Klear is compatible with most fungal and insecticidel biopesticides when applied at least two (2) days before or after application of the biopesticide.

Phytotoxicity - Although Bahama Klear has been tested on a wide variety of fruits, vegetables and nuts without phytotoxicity, there could be some varieties and cultivars that because of environmental factors and stages of growth could possibly foster systems. The per acre use rate of Bahama Klear is applicable for dilute spraying. Depending on the equipment used and the specific crop, the spray volume applied per acre. The application of the period of the spray volume application at the period of the spray volume application equipment, unless you have had specific previous experience, it is advisable to test for compatibility and tolerance to crop hiptory prior to full scale commercial utilization.

Consult Bahama Klear label for specific rates and timing of application by crop. Where application rates and intervals are provided in a range (e.g., 2-4 fluid ounces and 7 to 10 days) the higher rates and shorter spray time intervals are recommended when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops. The use of a surfactant, such as Cell-Li-WettTM as acceptable for plants having wavay or hairy suches. Bahama Klear larve contact with the plants and materials being treated. It is important to ensure that all surfaces are thoroughly wetted. Bahama Klear does not produce any visible residue or have a distinct odor. It does have a residual, especially if applied with a surfa

The requirements in this box apply to uses of this product that are not within the scope of the Workers Protection Standard for agricultural pesticides, 40 CFR part 170. The WP'S applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Do not allow re-entry into treated areas until apprays have

GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: Sprinkler including center pivot, lateral move, end row, side (wheel) roll, traveler, big gun, solid set or hand move: flood (basin); furrow, border or drip (trickle) irrigation and system(s). Do not apply this product through any other type of irrigation systems.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an imgation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety device for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Posting areas to be chemigated is required when 13 any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes my public areas such as schools, parks, playgrounds or other public facilities not including public roads, or 2) when chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters of at least 21/2 inches tall, and all letters and the symbol shall be in a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

words PESTICIDES IN IRRIGATION WATER.
This sign is in addition to any sign posted to comply with the Workers Protection Standard.

CHEMICATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 80 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply like upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete break (air gap) between the flow outlet and of the fill pipe and the top of the overflow rim of the reservoir tank rior to pesticide intended injection pipeline must contain a functional, automatic, quick-closing check wave to prevent the flow of fliquid back toward the injection. The pesticide injection pipeline must contain a functional, automatic, quick-closing check wave to prevent the flow of fliquid back toward the injection. The pesticide injection pipeline must contain a functional, automatic avaire located on the intake side of the injection pump and connected to the system interiors to provent flip of the manufacture of the system must contain functional interioristing controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (i.e. displaying pump, such as a positive displacement injection pump (i.e. displaying pump, such as a positive displacement injection pump (i.e. displaying pump, such as a positive displacement injection pump (i.e. displaying pump, such as a positive displacement injection pump (i.e. displaying pump, such as a positive disp

SPRINKLER CHEMIGATION

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The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the Imigation pipeline to prevent water source contamination from back flow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement pump (i.e., disphragin pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when wind speed favors drift beyond the area intended for treatment. When mixing, agitation is not necessary. Adjust the pit of the carrier water to 7 or below. It is an active, insecticide, nutrients, etc., add the BAHAMA KLEAR last if compatibility is needed to result and invalves and provide an activities and invalves and provide an activities and invalves and invalves

FLOOR (BASIN), FURROW AND BORDER CHEMIGATION

ms using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a structure or weir box to decrease potential for water source contamination from back flow it water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements: The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source

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- down.

 The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pump motor water pump motor

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the BAHAMA KLEAR last. If compatibility is in question, use a compatibility par test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the labels of all products used on the mixtures. BAHAMA KLEAR may be added through a traveling irrigation systems continuously or at the last 30 minutes of solid set or hand moved Irrigation systems. BAHAMA KLEAR readity disperses and needs no agitation.

DRIP (TRICKLE) CHEMIGATION

In this contain a functional check valve, vacuum relief valve and low pressure drain approprias

and on the irrigation pipeline to prevent water source

contamination mon back flow. The pesticide injection pipeline must store contain a functional, automatic, quick closs

the pesticide injection pimp. The pesticide injection pipeline must also contain a functional, normally closed, colenoid-operated valve located on the intake side of the injection pump and

connected to the system interioric to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically on an automatically and down. The

system must contain functional interioricing controls to automatically shut off the pesticide injection pump mortor pump stops. The irrigation line or water

pump must include a functional pressure switch which will stop the water pump motor when the water prump motor pump stops. The irrigation line or water

pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely

affected. Systems must use a metering pump such as a positive displacement injection pump (i.e. disphragm pump) effectively designed and constructed of materials that are

compatible with pesticides and capable of being fitted with a system interlock.

When mbxing, agitation is not necessary. Adjust the pit of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc, add the BAHAMA KLEAR last.

If compatibility is in question, use a compatibility is rest before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all

cautions and limitations on the label of all products used in the mixtures. BAHAMA KLEAR may be added any through a traveling irrigation system continuously or at the last 30 of

solid set or hand moved irrigation systems. BAHAMA KLEAR readily disperses and needs no agitation.

FOR SPRAY AND SOIL DRENCH APPLICATIONS

Always spray for total foliage coverage. When re-spraying the rates and severity of the disease vary with unforeseen conditions. However, in the event of severe disease, spraying intervals can be shortened to 3 to 5 days. At times, lower rates can be as effective as higher rates and should be tried first. Usually, preventive programs may be maintained at lower rates. Use of low volume spraying is effective against Sottytis and not effective against established powdery mildew and Xanthomonas infections. Also, applications on actively growing tissue may be more effective than applications on domaint tissue.

MINIMUM RECOMMENDED SPRAY VOLUME (GALLONS) PER ACRE WHEN APPLYING BAHAMA KLEAR

			BROUND
CROP	AERIAL	DILUTE	CONCENTRATE*
Vegetables	3	20	30
Field Crops	3	20	30
Small Fruits	5	150	30
Vines	5	150	30
Tree Crops	10	400	50
Citrus	10	125	30

insticide application equipment such as Curteo® or other similar sprayers which are capable of obtaining coverage at low volumes may be used at as low as 20 gpa of spray ume. The following specific instructions are based on general application procedures. The recommendations of the State Extension Service should be closely followed as to ng, frequency and numbers of sprays per season.

timing, frequency and numbers of sprays per season.

FROST INJURY PROTECTION
BACTERIAL ICE NUCLEATION INHIBITOR

Application of BAHAMA KLEAR made to all crops listed on this label at rates and stages of growth indicated on this label, at least 24 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria (<u>Pseudomonas syringae, Erwinia herbicola and Pseudomonas flourescens)</u> and may therefore provide some protection against light frost. Not recommended for those geographical areas where weather conditions favor severe frost.

The chart selevit is used to calculate correct ppms* of active ingredient (A.1) per voltime of carrier water. These volumes can be used for either conventional or

AMOUNT OF BAHAMA KLEAR PER VOLUME OF WATER

		FOR PROPER PPM'S* OF APPLIED ACTIVE INGREDIENT (as Copper)									
ppm's* of A. I.	30 gallons per acre	50 gallons per Acre	100 gallons per Acre	125 gallons per Acre	250 gallons per Acre	500 gallons per Acre					
50	3.85	6.4 oz.	12.8 oz.	16 az.	32 oz.	64 oz.					
75	5.78	9.6 oz.	19.2 oz.	24 oz.	48 oz.	96 oz.					
100	7.70 oz.	12.8 oz.	25.6 oz.	32. oz.	64 oz.	1 al.					
125	9.6 oz.	1 6 oz.	32 oz.	40 oz.	80 oz.	1.25 al.					
150	11.5 oz.	19.2 oz.	38.4 oz.	48 oz.	96 oz.	1.5 al.					
200	15.4 oz.	25.6 oz.	51.2 oz.	64 oz.	1 gal.	2 al.					
250	19.2 oz.	32 oz.	64 oz.	8 0 oz.	1.25 gal.	2.5 gal.					

* ppm = parts per million (of Copper)

		numbe (named)	A STATE OF THE PARTY OF THE PAR	
Disease	Rate per Acre	ppm's (copper) per 100 galions	of water	Instructions
Brown Rot	30-70 oz.	120-275 ppm	ENCOR VIOLEN	Apply at first indication of rain or first appearance of Brown Rot. Re-apply as needed during wet season.
Greasy Spot, Pink Pitting	25.6-64 oz.	100-250 ppm		Apply during mid-summer.
Scab	25.6-64 oz.	100-250 ppm		Apply shortly before trees begin to flush. Re-apply at 2/3 petal fell. Re-apply 4 weeks later, if necessary.
Melanose	25.6-64 oz.	100-250 ppm		Apply 2 times per year before the onset of spring and autumn rains.
Canker (Suppression)	12.8-84 oz.	50-250 ppm		Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require additional applications. Number and timing of applications will be dependent on disease pressure. Under heavy
		**12.6 lbs.		pressure, each new flush of growth should be sprayed. Heavily infected trees should be sprayed with a minimum dosage of 250 ppm with a follow up spray in 7-14 days at 200ppm.

Crop Instructions 19 2-32 Apply 10 to 14 days before each harvest or earlier if disease Alfalfa 75-125 ppm threatens. NOTE: Spray injury may occur with sensitive varieties such as Begin treatment when disease first appears and repeat every 7 to 10 days or as needed. Use the higher rates and shorter spray intervals when conditions favor disease. Corn (Field Corn Pop Sweet corn) 75-125 ppm **4.2 lb. 19.2-25.6 oz. Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14 day intervals or as needed. Reduce sprays to 7 day intervals Cercospora leaf 75-100 ppm Peanut during humid weather. Use the higher rates when conditions only 75 to 125 ppm at 7 to 10 day intervals or as needed 19.2-32 0 Early Blight, Late Blight starting when plants are 2 to 6 inches high in locations where disease is light. Add up to 32 oz. per acre when disease is Potato 75-125 ppm **25.0 lb. 19.2-38.4 oz Begin applications when conditions first favor disease development and repeat at 10 to 14 development and repeat at 10 to 14 day intervals or as needed. Use higher rates when conditions favor disease. Addition of a sticker/spreader is recommended. Cercospora Leaf 75-150 ppm Sugar Beets *7.86 lb. 19.2-25.6 oz. Make First application at early heading and follow with second spray 10 days later. Use the higher rates when conditions found fleets. Helminthosporiu Spot Blotch, Septoria Leaf 75-100 ppm *1.06 lb

Cron	Small Fruits Disease	cre	Ppm's (copper) per	Instructions
Crop	Disease		100 gallons water	
Blackberry (Aurora, Boysen, Cascade, Chehalem, Logan, Marton, Santiam, Thornless)	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dormant spray after pruningfarfaining in the spring. If needed, agricultural-type spray oil may be added.
	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	Low 19.2 az	75 ppm	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
	Bacterial Canker	33-51 oz.	125-200 ppm	Make application before fall rains and a second application 4 weeks later Use the higher when conditions favor disease.
Blueberry	Fruit Rot, Phomopsis Twig Blight	25.6-51.2 oz.	100-200 ppm	Dormant Application: Begin applications when bloom buds begin to swell. Make additional applications at 10 to 14 day intervals or as needed before blooms open.
Cranberry	Fruit Rot	51.2 oz.	200 ppm	Make application in late bloom. Apply one or two additional applications at 10 to 14 day intervals or as needed depending on disease severity.
	Rose Bloom	51.2 oz.	200 ppm	Apply three sprays on 10 to 14 day schedule or as needed as soon as symptoms are observed.
	Bacterial Stem Canker	51.2 oz.	200 ppm	Apply post harvest and again in spring at bud swell. Apply one or two additional applications at 10 to 14 intervals or at needed depending on disease severity.
	Leaf Blight, Red Leaf Spot, Stern Blight, Tip Blight (Monilinia)	51.2 oz.	200 ppm	Apply delayed dormant spray in the spring. Repeat at 10 to 14 day intervals or as needed through pre-bloom.
Current, Gooseberry	Anthracnose, Leaf Spot	64 oz.	250 ppm	Make Initial application after first leaves have expanded Continue on a 10 to 14 day schedule or as needed during well conditions in the spring. Make an additional application after harvest.
Raspberry	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dorman spray after training in the spring, if needed, agricultural-type spray oil may be added.
	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	Low 19.2 oz.	75 ppm	Apply when leaf buds begin to open and repeat when flowe buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certail environmental conditions such as hot or prolonged mois periods. Discontinue applications if signs of crop injury appear.
	To the same of	**10.0 lb.		
Strawberry	Angular Leaf Spot (Xanthomonas), Leaf Blight, Leaf Scorch, Leaf Spot	19.2-25.6 oz	75-100 ppm	Begin application when plants are established and continue or a weekly schedule throughout the season. Apply in at least 2 gallons of water. Use the higher rates when conditions favo disease. NOTE: Discontinue applications if signs of crop injury appear.

**8.19 lbs

**Maximum Annual Load of copper applied per growing season. (lb Cu²+/A)²

			the same of the same of the same of	Vines	
Grape	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	, Phomopsis,		Begin applications at bud break with subsequent applications throughout the sear depending on disease severity. Use the higher rates when conditions favor disease. NOTE: Foliage injury may occur on copper sensitive varieties such as Concu	
		**20.0 lb.		Delaware, Niagara and Rosette.	
Hops	Downy Mildew	19.2 oz.	75 ppm	Make crown treatments after pruning, but before training. After Training, additional treatments are needed at about 10 day intervals. NOTE: Discontinue use two weeks before harvest.	
Kiwi	Erwinia herbicola, Pseudomonas flourescens, Pseudomonas syrinsae	38.4 oz.	150 ppm	Apply in 200 gallons of water per acre. Make applications on a monthly basis. A maximum of three applications may be made.	

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Atemoya	Anthracnose	25.6-38.4 oz. **12.6 lb.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Carambola	Anthracnose	38.4-64 oz.	150-200 ppm	Make initial application before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Chives	Downy Mildew	19.2 oz.	75 ppm	Begin application when plants are established in the field, Repeat every 7 to 10 days or as needed depending on disease conditions.
Dill	Phoma Leaf Spot, Rhizoctonia Foliage Blight	19.2-25.6 oz. **3.95 lb.	75-100 ppm	Begin applications when plants are first established in the field and repeat at 7-10 day intervals or as needed depending on disease severity and environmental conditions. Use the higher rates for severe disease.
Guava	Anthracnose, Red Algae	25.6-38.4 oz	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Litchi	Anthracnose	25.6-38.4 oz. **4.92 lb.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Use the higher rates for severe disease.
Macadamia	Anthracnose	38.4-64 oz.	150-250 ppm	Initiate sprays at first sign of flowering and repeat on a weekly schedul- until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea)	38.4 – 64 oz.	150-250 ppm	Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease?
Marney Sapote	Algal Leaf Spot	38.4-64oz.	150-250 ppm	Apply when conditions favor disease development. Repeat on a 14 to 30 schedule or as needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease.

Crop	Disease	Rate/Acre	Ppm's (copper) per 100 gallons of water	Instructions	
Almond, Apricot, Cherry, Plum,	Bacterial Blast (Pseudomonas), Bacterial Canker,	51.2-64 oz.	200-250 ppm	Make first application before fall rains and a second at late dormant. Use the higher rates wher conditions favor disease. If needed, agricultural-type spray oil may be added. For Cherries: Where disease is severe, an additional application shortly after harvest may be required.	
Prune	Coryneum Blight (Shot Hole) Blossom Brown Rot, Coryneum	51.2-64 oz. on almond,	200-250 ppm	NOTE: Foliar injury may occur from post-bloom sprays on almonds, especially on NePlut varieties. Apply during early bloom. Do not apply after full bloom or injury may occur. Use the higher rates when rainfall is heavy and disease pressure is high.	
4	Blight (Shot Hole) Black Knot*	All others 60-90 oz. 32-64 oz.	125-250	Make application at bud swell up to early bloom for early disease suppression. Apply before ful	
	(Plum)		ppm	bloom. Use the higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury, do not use after full bloom.	
	Cherry Leaf Spot* (Sour Cherries Only)	38.4-84 oz.	150-250 ppm	Apply at petal fall as well as 1 to 2 times after petal fall. Use the lower rates where diseas infection is light and use the higher rates for a domant application or where disease infection is moderate to heavy. Do not apply to sweet cherry or the English Morelio variety as severe injury will result. NOTE: Moderate to severe injury such as leaf spotting and defoliation may occur from post bloom applications.	
Apple	Anthracnose, Blossom Blast,	**18.0 lb. 51.2-84 oz.	200-250	Apply before fall rains. Use the higher rates when conditions favor disease.	
	European Canker (Necrie), Shoot Blast (Pseudomones)		ppm	NOTE: Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.	
-	Apple Scab, Fire Blight	High 51.2-64 oz.	200-250 ppm	Make application between silver-tip and green-tip. Apply as a full cover spray for early seasor disease suppression. NOTE: Moderate to severe crop injury may occur from late application; discontinue use when green-tip reaches 1/2 inch.	
	Apple Scab	Low 19.2-32 oz.	75-125 ppm	Extended spray schedule where fruit finish is not a concern: Continued applications may be made at 5 to 7 day intervals or as needed between 1/2 inch green-tip and first cover spray.	
	Fire Blight	Low 19.2-32 oz.	75-100 ppm	NOTE: Moderate to severe crop injury may result from this extended spray schedule. It is not intended for fresh market apples or for apples where fruit finish is a concern as it is likely to cause fruit russetting.	
	Collar Rot, Crown Rot	32 oz.	125 ppm	Mix 100 gallons of water. Apply 4 gallons of solution as a drench on the lower trunk area of each tree. Apply in early spring or in fall after harvest for beast results. Do not apply to foliage or fruit.	
Avocado	Anthracnose, Blotch, Scab	51.2-64 oz.	200-250 ppm	Apply when bloom buds begin to swell and continue application at monthly intervals for five to st applications. Use the higher rates when conditions favor disease.	
Banana	Sigatoka (Black and Yellow)	** 18.9 lb. 19.2 oz.	75 ppm	14 day schedule or as needed throughout the wet season. Apply at 21 day intervals or as	
	Black Pitting	32 oz.	125 ppm	during dry periods. Mix: 100 gallons of water. Apply to the fruit stem and the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.	
Cacao	Black Pod	**18.9 lb. 19.2-64 oz.	75-250	Begin applications at the start of the rainy season and continue while infection conditions persist.	
Coffee	Coffee Berry Disease (Collectotrichum coffeanum)	**15.75 lb. 38.4-64 oz.	150-250 ppm	Apply first spray after flowering and before onset of long rains and then at 21 to 28 day interval or as needed until picking. Use the higher rates when conditions favor disease.	
	Bacterial Blight (Pseudomones syringse)	38.4-64 oz.	150-250 ppm	Begin spray program before the onset of long rainy periods and continue throughout the rainy season at 14 to 21 day intervals or as needed. The critical time for spraying to control disease is just before, during and after flowering(s), especially when coinciding with wet weather. Use the higher rates when rainfall is heavy and disease pressure is high.	
	Leaf Rust (Hemileia vastatrix)	19.2-32 oz.	75 ppm	rigner races when raintau is nearly and disease pressure is right. Apply before the onset of rain and then at 21 day intervals or as needed while the rains continue Use the higher rates when rainfall is heavy and disease pressure is high.	
	Iron Spot (Cercospora coffeicola), Pink Disease (Corticium	19.2 oz.	75 ppm	Use concentrate or dilute spray. Begin treatment at the start of wet season and continue a monthly intervals for three applications.	
Filbert	salmonicolor) Bacterial Blight	64-128 oz.	250-500 ppm	Apply as a post harvest spray. In seesons of heavy rainfall, apply a second spray when thre fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and diseas pressure is high. If needed, agricultural-type spray oil may be added.	
Mango	Anthracnose	**24.0 lb. 38.4-64 oz.	150-250	Apply monthly after fruit set until harvest. Use the higher rates when rainfall is heavy and disease	
Olive	Olive Knot, Peacock Spot	**18.2 lb. 64-76.8 oz.	250-300 ppm	pressure is high. Make first application before winter rains begin. A second application in early spring should b made if disease is severe. Apply the higher rates for heavy disease pressure or when condition	
Peach,	Bacterial Blast	**6.3 lb. 51.2-76.8	200-300	favor disease development. Make first application before fell rains and a second at late dormant. For peach leaf curt, lat	
Nectarine	(Pseudomonas), Bacterial Canker, Bacterial Spot (Xanthomonas), Coryneum Blight	••18.0 lb.	ppm	dormant application must be made before leaf buds swell. Use the higher rates when rainfall an disease pressure is high. If needed, agricultural-type spray oil may be added.	
	(Shot Hole), Leaf Curi		000.000	ALL STREET, ST	
	Biossom Brown Rot, Coryneum Blight (Shot Hole), Leaf Curl	51.2-76.8 oz.	200-300 ppm	Full cover spray at pink bud. Use the higher rates when conditions favor disease.	
	Bacterial Spot	19.20z.	75 ppm	Post-bloom application applied at first and second cover sprays. NOTE: Do not spray 3 weeks prior to harvest. Use only recommended rates. Spotting of leave and defoliation may occur from use in cover sprays.	
Pear	Fire Blight	**18.8 lb. 19.2 oz.	75 ppm	Apply 5 day intervals or as needed throughout the bloom period. NOTE: Russetting may occur in copper sensitive varieties. Excessive dosages may cause fru	
3 4	Biossom Blast (Pseudomones)	51.2-76.8 oz.	200-300 ppm	russet on any variety. Apply before fall rains and again during dormancy before spring growth starts. Use the higher rates when disease pressure is high or when conditions favor disease development.	
Pecan	Kernel Rot, Shuck Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristularielle pyramidells)	**16.0 lb. 19.2-32 oz.	75-125 ppm	For suppression, apply in sufficient water to ensure complete spray coverage at 2 to 4 wee intervals or as needed, starting at kernel growth and continue until shucks open. Use the higher ates and shorter spray intervals if frequent rainfall occurs.	
	Ball Moss, Spanish Moss	38.4-64 oz.	150-250 ppm	Apply in 100 pallons of water in the spring when ball moss is actively growing, using 1 ½ gallon of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. The addition of non-ionic surfactant will improve control. A second application may be required after 12 months.	
Pistachio	Botryosphaeria Panicle and Shoot Blight, Botytris Blight, Late Blight (Alternarie atternate),	**8.4 lb. 32-64 oz.	125-250 ppm	Make initial application at bud swell and repeat on a 14 to 28 day schedule or as needed, disease conditions are severe, use the higher rates and shorter spray intervals.	
	Septoria Leaf Blight	**8.4 lb.	17		
Quince	Fire Blight	19.2 oz. **16.0 lb.	75 ppm	Apply at 5 day intervals or as needed throughout the bloom period. Apply in adequate water for thorough coverage.	
Walnut	Walnut Blight	38.4-64 oz.	150-250 ppm	Apply at first spray at early pre-bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nuttet stage or as needed when frequent rainfait of extended periods of moisture occur. Thorough coverage of catkins, leaves and nuttets it essential for effective control. NOTE: Adequate control may not be obtained when copper tolerant species of Xanthomona	

Сгор	Disease	Rate/Acre	Per 100 gallons of water	Instructions
Bean (Dry, Green)	Brown Spot, Common Blight, Halo Blight	19.2-25.6 oz.	75-100 ppm	For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14 day schedule or as needed depending on environmental conditions. Use the higher rates for more severe disease.
Beet (Table Beet, Beet Greens)	Cercospora Leaf Spot	19.2-32 oz.	75-125 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use the higher rates when conditions favor disease.
Carrot	Alternaria Leaf Spot Carcoapora Leaf Spot	19.2 oz.	75 ppm	Begin applications when disease first threatens and repeat at 7 to14 day intervals or as needed depending on disease severity.
Celery, Celeriac	Carcompora Easy Blight, Septoria Late Blight	19.2 oz.	75 ppm	Begin applications as soon as plants are first established in the field, repeating at 5 to 7 day intervals or as needed depending on disease severity and environmental conditions.
Crucifers (Broccoli, Blussel Sarata Cablage, Caulifower, Collard Greens Turnip Geans)	Black Leaf Spot (Alternia), Black Rot (Xanthomonas) Downey Mildew	19.2 – 25.6 oz.	75 – 100 ppm	Begin application after transplants are set in the field, or shortly after emergence of the field seeded crops or when conditions favor disease development. Apply at 7 to 10 intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Reddening of older leaves may occur on broccoil and a flecking of wrapper leaves may occur on cabbage.
Cucerbits (Bensaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon)	Alternia Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Powdery Mildew, Watermeion Bacterial Fruit Blotch (suppression)	19.2-25.6 oz.	75-100 ppm	Begin applications prior to disease development and continue while conditions are favorable for disease development. Repeat at 5 to 7 day intervisio or as needed. Use the higher rates when conditions favor disease. NOTE: Crop Injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	19.2 oz.	75 ppm	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals or as needed depending on disease severity.
Okra	Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spot, Powdery Mildew	19.2-32 oz.	75 ppm	Begin treatment when disease first threatens and repeat every 5 to 10 days or as needed depending on disease severity. Use the higher rates and shorter spray intervals when conditions favor disease.
Onion, Garlic	Bacterial Blight, Downy Mildew, Purple Blotch	19.2 oz.	75 ppm	Begin when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals or as needed depending on disease severity. Can cause phytotoxicity to leaves.
Pea	Powdery Mildew	19.2-25.6 oz.	75-100 ppm	Begin applications when disease symptoms first appear and repeat weekly intervals or as needed. Use the higher rates when conditions favor disease.
Pepper	Anthracnose, Bacterial Spot, Cercospora Leaf Spot	13-25 oz.	50-100 ppm	Begin applications when conditions first favor disease development and repeat at 7 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.
Spinach	Anthracnose, Blue Mold, Cercospora Leaf Spot, White Rust	19.2-25.6 oz.	75-100 ppm	Begin application when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Flecking may occur on spinach leaves.
Tornato	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	19.2-32 oz.	75-125 ppm	Begin applications when disease first threatens and repeat at 5 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.
Watercress	Cercospora, Leaf Spot	**17.4 lb. 19.2 oz.	75 ppm	Begin applications when plants are first established in the field, repeating at 7 to 14 day intervals or as needed depending on disease severity. Do not exceed four applications per crop. Apply using ground spray equipment at no less than 50 gallons of spray solution per acre.

**Maximum Annual Load of copper applied per growing season (lb Cu²+/A)²

LIMITED WARRANTY AND LIMITATION OF REMEDIES

Seller warrants that the product conforms to the chemical description and is reasonably fit for the purpose stated on the label for use under normal conditions, but makes no other warranties of FITNESS or MERCHANTABILITY expressed or implied, or any other warranty if the product is used contrary to the label instructions or under abnormal conditions not foreseeable to the seller. In no case shall the seller be liable for more than the cost of the product to the buyer, and will in no event be liable for any consequential, special or indirect damages connected with the use or handling of this product. This product is offered and the buyer or user eccepts it's subject to the foregoing terms which may not be varied

FOR EMERGENCY ASSISTANCE CALL

CHEMTREC - 1-800-424-9300

MAGNA-BON II, LLC. 1531 N.W. 25th Drive Okeechobee, Fl. 34972 853-357-0400

For Swimming Pools, Outdoor Hot Tubs and Spas and for use on Raw Agricultural Commodities

Copper Sulfate Pentahydrate* (CAS 7758-99-8) Other Ingredients

100%

*Equivalent to 5.0% metallic copper

A Chelated Copper Product

KEEP OUT OF THE REACH OF CHILDREN

If Inhaled	First Aid eHold eyes open and rinse slowly and genity with water for 15-20 minutes. • Remove contacts lenses, if present, after the first 5 minutes, then continue rinsing. • Oal a Polson Control Center or Doctor for treetment advice.		
If Swallowed	Call a Poison Control Center or Doctor immediately for treatment advice. Have a person sip a glass of water if able to do so. Do not induce vernifing uniess told to do so by a Poison Control Center or Doctor.	1	
If Inhaled	Move person to tresh air. If person is not treativing, call 911 or an embulance, and give artificial respiration, preferably mouth-to-mouth, if possible. Call a Policon Control Center or Doctor for further treatment.		
If on Skin	Take off conteminated clothing. Rinne skin immediately with plenty of water for 15-20 minutes. Call a Policon Control Center or Doctor for treatment advice.		
HOT LINE NUMBER Have the product cor	Italians or label with you when calling a Poison Control Center or Doctor or going for treatment. You may also contact 1-800-4243-9300 (Chemitrec) for	emergency medical treatme	nt

Net Contents: U.S. Gellons U.S. Ounces

STORAGE AND DISPOSAL

Prohibition: Do not contaminate water, food, or feed by storage or disposal.

Storage: Store in a safe place away from PET AND KEEP OUT OF THE REACH OF CHILDREN. Store away from excessive heat. Magna-Bon BAHAMA KLEAR will freeze. Always keep container closed. Store Magna-Bon BAHAMA KLEAR in its original container only. Bulk Magna-Bon BAHAMA KLEAR shall be stored and handled in 316L stainless steel, fiberglase, PVC's, polypropyfenes or plastic container. Keep sway from gavanized pipe and any nyion storage handling equipment.

Pesticide bisposal: Excess Magna-Bon BAHAMA KLEAR should be disposed of through label use. Do not containnate lakes, invers or streams as this may cause fish kill.

Pesticide vastes are acutely hazardous. Improper disposal of excess pesticide, spray moture or rinsate is a violation of Federal law. If these wastes can not be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. In the event of a splil, neutralize with limestone or baking sock before disposal. Concentrate may deteriorate concrete.

Container Disposal: Do not reuse empty containers. Triple rinse (or equivalent), Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill. Or by other approved State and local procedures. Rinsing and reuse of 'toles' is permissible.

PRECAUTIONARY STATEMENTS

Danger: Corroselve: Causes irreversible eye damage and skin irritation. Do not get into eyes or on cicthing. Wear goggles or safety glasses. Harmful if ewallowed, inhaled or absorbed through the skin. May cause allergic skin response. Avoid contact with skin. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Politzart Discharge Elimination

or regional Office of the EPA.

For Terrestrial Uses: This pesticide is toxic to fish and aquatic organisms. Do not apply directly to water or areas where surface water is present or to intertidal areas below the mean high mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

GENERAL INFORMATION

GENERAL INFORMATION

Magna-Bon BAHAMA KLEAR is a copper is a copper sulfate pentahydrate formulation used to control bacteria and algae in swimming pools and outdoor hot tubs and spas. It is used as a post harvest wash to control bacteria and fungi that cause spoilage in fruits and vegetables and is used and growing agricultural commodities to control bacteria

DIRECTIONS FOR USE

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Application:

For control of algae and odor causing bacteria in swimming pools, outdoor hot tubs and spas, add Magna-Bon Bahama Klear as per chart below.

Water 15,000 gallon 30,000 gallon 60,000 gallon Magna-Bon Bahama Klear 2-6 quarts 4-12 quarts

Application should be made before visible algae appear. Where visible algae is present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive build up of metallic copper. Magne-Bon Sahama (Near may be used at the higher rates to help control odors and algae during the winter months while the pool is not being used. Recommended application rates yield (1 ppm to 3 ppm) metallic copper.

To control algae and bacteria in swimming pools, spas & hot tubs. Apply at the rate of 2 - 4 quarts of Magna-Bon Bahama Klear per 60,000 gallons. This will provide a level of 0.5 ppm to 1.0 ppm metallic copper. Application should be made before visible algae are present, apply at the higher rate. For maintenance dosages and where visible algae are present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive buildup of metallic copper. Magna-Bon Bahama Klear may be used to help control pool doors and algae during whiter months. Maintain the higher rate while the pool is not being used during the winter. Do not discharge treated pool effluent where it will drain into lakes, streams, ponds, or public water.

General Algae/Bacteria Control

For suppression of bacterial codors and for control of siges, apply in late spring or early summer when algae and bacteria first appear. The dosages are variable and depend upon algae/bacteria species, water hardness, water temperature, amount of sige-bacteria probacteria presents, as well as whether water is clear, turbid, flowing or static. Preferably, the water should be clear with the temperature above 60°F or 15.6°C. Higher dosages are required at lower temperatures, higher algae-bacteria concentration, and for hard waters. Application should be done by pouring Magna-Bon Bahama Klear directly from the container into the pool, outdoor hot tub or spa. Several application points speed up dispersal. Static water requires less chemical for signe-bacteriar control than does flowing water. Use higher dosages and filamentious algae (port accum) and lower dosages for planktonic algae. If there is uncertainty about the dosage, begin with a lower dose and increase until control is achieved, or until the maximum allowable level has been reached.

For Use as a Post Harvest Wash an Agricultural Commodities: To use as an algicide, bactericide, fungicide post harvest wash the following directions apply.

For use as a post harvest wash, this product may be applied with any type of application equipment that gives thorough and uniform coverage. Devices may include, but are not limited to, durink and dip tanks, spray applicators or fogging.

Washing raw agricultural commodities will both clean and control bacteria and fungi that cause spoilage. Depending on water quality and cleaning conditions, or where addit new processing water, add from one hundred three (103) up to one hundred threet) eight (128) fluid ounces of Magne-Bon Behama Klear per one thousand (1,000) gallons water. Allow thorough coverage of the commodity and then let dity. Rinsing is not required or recommended.

Depending on water quality, cleaning conditions or when adding new processing water, start at lower rinse rates. Add Bahama Klear as per the chart below

BAHAMA KLEAR 25.6 ounces to 32 ounces 51.2 ounces to 64 ounces 103 ounces to 128 ounces

RINSE WATER

Remember: Commodities need only be immersed long enough to allow complete coverage.

FOR USE AS A FUNCICIDE/BACTERICIDE ON GROWING AGRICULTURAL COMMODITIES: For use as a systemic fungicide/bactericide on growing agricultural commodities, the following directions apply.

Commodities, the following directions apply.

GENERAL INSTRUCTIONS

Bahama Klear may be applied with any type of application equipment that gives uniform coverage of all foliage, including ground, aerial and low volume sprayers as specified on this label. Equipment used for application should be PVC or 316L stainless steel. Bahama Klear is compatible with most fungial and insecticidal biopesticides when applied at least two (2) days before or after application of the biopesticide. Phytotoxicity - Although Bahama Klear has been tested on a wide variety of fruits, vegetables and nuts without phytotoxicity, there could be some varieties and cultivars that because of environmental factors and stages of growth could possibly foster systems. The per acre use rate of Bahama Klear is applicable for dilute spraying. Depending on the equipment used and the specific crop, the spray volume applied per acre will differ. Refer to the Minimum Recommended Spray Volume Table. Complete spray coverage is essential to assure optimum performance from Bahama Klear. When treating by aerial application or two volume application equipment, unless you have had specific previous experience, it is advisable to test for competibility and tolerance to crop injury prior to full scale commercial utilization.

previous experience, it is advisable to test for compastibility and tolerance to crop injury prior to full scale commercial distration.

Consult Baharian Klear label for specific rates and filming of application by crop. Where application rates and intervals are provided in a range (e.g., 2-4 fluid ounces and 7 to 10 days) the higher rates and shorter spray time intervals are recommended when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops. The use of a surfactant, such as Cell-L-Wett⁻¹ is acceptable for plants having waxy or hairy surfaces. Bahariae Klear works via surface contact with the plants and materials being treated. It is important to ensure that all surfaces are thoroughly wetted. Bahariae Klear does not produce any visible residue or have a distinct odor, it does have a residue, especialty if applied with a surfactant.



BAHAMA KLEAR Algaecide/Bactericide/Fungicide

SPECIAL PRECAUTIONS

Bo nosmitweith acidic compounds such as AllietteTM within 14 days before or after application of same.

This spodus may be reactive on missonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces.

Do not signly on cars, houses, lawn furniture, etc.

Environmental conditions such as extended periods of wet weather, acid rain, etc., which after the pH of the leaf surface may effect the performance of BAHAMA KLEAR resulting in possible phytotoxicity or ioss of effectiveness.

Do not mis with poot ash.

It must be determined in the selection process if proper application equipment is svaliable and if the weste associated with its use can be properly handled. Marter

Do not mix with pot ash. It must be determined in the selection process if proper application equipment is available and if the weste associated with its use can be properly handled. Materials used on the construction of application equipment is also an important factor as agricultural chemicals are often reactive with soft metals such as aluminum and even some synthetic materials such as plastics, rubbers, etc.. Therefore it is necessary when working with equipment containing these materials, that they are thoroughly flushed with clean water after each days use.

Personal Protective Equipment: Some materials that are chemical-resistant to this product are listed below.

Icotors and other handlers must wear.

Long steeved shirt
Protective eyewear

Long pants
Shoes plus socks
Chemical resistant gloves made of berrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinykchloride or viton. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Users should: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Use this product only in accordance with its labeling and with the Workers Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to used of this product that are covered by the Workers Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants overalls, protective eyewear, chemical resistant gloves, and shoes plus socks.

The requirements in this box apply to uses of this product that are not within the scope of the Workers Protection Standard for agricultural pesticides, 40 CFR part 170. The WP'S applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. <u>Do not allow re-entry into treated areas until sprays have dired.</u>

GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: Sprinkler including center pivot, lateral move, end row, side (wheel) roll, traveler, big gun, solid set or hand move; flood (basin); furnow, border or drip (trickle) irrigation and system(s). Do not apply this product through any other type of irrigation systems.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety device for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Posting areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor cample, businesses, day care centers, hospitals, in-patient clinics, nursing homes my public areas such as schools, parks, pleygrounds or other public facilities not including public roads, or 2) when chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters of at least 21/Z inches tall, and all letters and the symbol shall be in a color which sharply contrasts with their immediate background. At the top of the sign shall be the words REEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

This sign is in addition to any sign posted to comply with the Workers Protection Standard.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

CHEMIOATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 80 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems should be discharged into a reservoir tank prior to pesticide infroduction. There shall ask (all gap) between the flow outlet end of the fill pipe and the top of the overflow irin of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of liquid back toward the injection. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valves to prevent the flow of liquid back toward the injection. The pesticide injection pipeline must contain a functional must ensure the public valves of the injection pump and connected to the system interior to revent fluid from being withdrawn from the supply tank when the irrigation system is ensured to the system must contain functional interiorist interiorists tentrolists to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide injection pump when the water pump must use a metering pump, such as a positive displacement injection pump (i.e. displaying pump) such as a positive displacement injection pump (ii.e. displaying pump) such as a positive displacement injection pump (iii.e. displaying pump) such as a positive displacement injection pump (iii.e. displaying pump) such as a

SPRINKLER CHEMICATION

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump fluid injection pump when the water pump motor stops. The irrigation is adversely effected. Systems must use a metering pump, such as a positive displacement pump (i.e., glaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when wind speed favors drift beyond the area intended for treatment. When mixing, agitation is not necessary. Adjust the pi-of the carrier water to 7 or below. It using sickers, spreadies, insecticides, nutrients, etc., add the BAHAMA KLEAR last. To compatibility is question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the label of all products used in the mixtures. May be added through a traveling irrigation system or at the last 30 minutes of solid set or hand moved irrigation systems. BAHAMA KLEAR

FLOOR (BASIN), FURROW AND BORDER CHEMIGIATION

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field end downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination back flow.

 The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of figuid back toward the injection pump.

 The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the Irrigation system is either automatically or manually shufurant.
- down.

 The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

 Systems must use a matering pump, such as a positive displacement pump (i.e. disphragm pump) effectively designed and constructed of materials that are competitive with pesticides and capable of being filled with a system interlock.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the BAHAMA KLEAR last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the labels of all products used on the indutures. BAHAMA KLEAR may be added through a traveling irrigation systems continuously or at the last 30 minutes of solid set or hand moved irrigation systems. BAHAMA KLEAR readily disperses and needs no agitation.

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and on the irrigation pipeline to prevent the flow of liquid back toward the
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solid set or hand moved irrigation systems. BAHAMA KLEAR readily disperses and needs no agitation.

FOR SPRAY AND SOIL DRENCH APPLICATIONS

Always spray for total foliage coverage. When re-spraying the rates and severity of the disease vary with unforeseen conditions. However, in the event of severe disease, spraying intervals can be shortened to 3 to 5 days. At times, lower rates can be as effective as higher rates and should be tried first. Usually, preventive programs may be maintained at lower rates. Use of low volume spraying is effective against Botydis and not effective against established powdery mildew and Xanthomonas infections. Also, applications on actively growing tissue may be more effective than applications on domaint tissue.

MINIMUM RECOMMENDED SPRAY VOLUME (GALLONS) PER ACRE WHEN APPLYING BAHAMA KLEAR

		BROUND
AERIAL	DILUTE	CONCENTRATE*
3	20	30
3	20	30
5	150	30
. 5	150	30
10	400	50
10	125	30
	3 3 5 5	AERIAL DILUTE 3 20 3 20 5 150 5 150 10 400

Pesticide application equipment such as Curtec® or other similar sprayers which are capable of obtaining coverage at low volumes may be used at as low as 20 gpa of spray olume. The following specific instructions are based on general application procedures. The recommendations of the State Extension Service should be closely followed as to ming, frequency and numbers of sprays per season.

FROST INJURY PROTECTION

BACTERIAL ICE NUCLESTION INHIBITOR

Application of BAHAMA KLEAR made to all crops listed on this label at rates and stages of growth indicated on this label, at least 24 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria (<u>Pseudomonas svingae, Enviria herbicola and Pseudomonas flourescens)</u> and may therefore provide some protection against light frost. Not recommended for those geographical areas where weather conditions favor severe frost.

The chart below is used to calculate correct ppm's* of active ingredient (A.I.) per volume of carrier water. These volumes can be used for either conventional or

	FOR PROPER PPM'S OF APPLIED ACTIVE INGREDIENT (as Copper)									
ppm's* of A. I.	30 gallons per acre	50 gallons per Acre	100 gallons per Acre	125 gallons per Acre	250 gallons per Acre	500 gallons per Acre				
50	3.85	6.4 oz.	12.8 oz.	16 oz.	32 oz.	64 oz.				
75	5.78	9.6 oz.	19.2 oz.	24 oz.	48 oz.	96 oz.				
100	7.70 oz.	12.8 oz.	25.6 oz.	32. oz.	64 oz.	1 al.				
125	9.6 oz.	1 6 oz.	32 oz.	40 oz.	80 oz.	1.25 al.				
150	11.5 oz.	19.2 oz.	38.4 oz.	48 oz.	96 oz.	1.5 al.				
200	15.4 oz.	25.6 oz.	51.2 oz.	64 oz.	1 gal.	2 al.				
250	19.2 oz.	32 oz.	64 az	8 0 oz.	1.25 gal.	2.5 gal.				

* ppm = parts per million (of Copper)

The state of the s		Grapefruit, Kumquat, Leme	Tangelo, Tangerine		
Disease	Rate per Acre	ppm's (copper) per 100 gallons	of water	Instructions	
Brown Rot	30-70 oz.	120-275 ppm		Apply at first indication of rain or first appearance of Brown Rot. Re-apply as needed during wet season.	
Greasy Spot, Pink Pitting	25.6-84 oz.	100-250 ppm		Apply during mid-summer.	
Scab	25.6-64 oz.	100-250 ppm	900	Apply shortly before trees begin to flush. Re-apply at 2/3 petal fall. Re-apply 4 weeks later, if necessary.	
Melanose	25.6-64 oz.	100-250 ppm		Apply 2 times per year before the onset of spring and autumn rains.	
Canker (Suppression)	12.8-64 oz.	50-250 ppm		Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require additional applications. Number and timing of applications will be dependent on disease pressure. Under heavy pressure, each new flush of growth should be sprayed. Heavily infected trees should be sprayed with a minimum dosage of 250 ppm with a follow up spray in 7-14 days at 200ppm.	
	FIELD				

son (lb Cu²+/A)

Crop Alfalfa 75-125 ppm threatens. NOTE: Spray injury may occur with sensitive varieties such as Begin treatment when disease first appears and repeat every 7 to 10 days or as needed. Use the higher rates and shorter spray intervals when conditions favor disease. Corn (Field Corn Pop Sweet corn) Bacterial Stalk Ro 75-125 ppm **4.2 lb. 19.2-25.6 oz. Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14 day intervals or as needed. Reduce sprays to 7 day intervals during humid weather. Use the higher rates when conditions Cercospora leaf Spot 75-100 ppm vor disease.

only 75 to 125 ppm at 7 to 10 day intervals or as needed 19.2-32 o Early Blight, Late starting when plants are 2 to 6 inches high in locations where disease is light. Add up to 32 oz. per acre when disease is Potato 75-125 ppm Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use higher rates when conditions favor disease. Addition of a sticker/spreader is recommended. Cercospora Leaf 75-150 ppm Sugar Beets *7,86 lb 19.2-25.6 oz. Make First application at early heading and follow with second spray 10 days later. Use the higher rates when conditions **1.06 lb

ng season (ib Cu²+/AV

0	Small Fruits	Instructions		
Crop	Disease	re	Ppm's (copper) per 100 gallons water	Instructions
Blackberry (Aurora, Boysen,	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest Apply delayed dorman spray after pruningstraining in the spring. If needed agricultural-type spray oil may be added.
Cascade, Chehalem, Logan, Marion, Santiam, Thornless)	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	Low 19.2 oz	75 ppm	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be add to the state of the sta
	Bacterial Canker	33-51 oz.	125-200 ppm	Make application before fall rains and a second application 4 weeks later Use the higher when conditions favor disease.
Blueberry	Fruit Rot, Phomopsis Twig Blight	25.6-51.2 oz.	100-200 ppm	Dormant Application: Begin applications when bloom buds begin to swell. Make additional applications at 10 to 14 day intervals or as needed before blooms open.
Cranberry	Fruit Rot	51.2 oz.	200 ppm	Make application in late bloom. Apply one or two additional applications at 10 to 14 day intervals or as needed depending on disease severity.
	Rose Bloom	51.2 oz.	200 ppm	Apply three sprays on 10 to 14 day schedule or as needed as soon as symptoms are observed.
	Bacterial Stem Canker	51.2 oz.	200 ppm	Apply post harvest and again in spring at bud swell. Apply one or two additional applications at 10 to 14 intervals or at needed depending on disease severity.
	Leaf Blight, Red Leaf Spot, Stern Blight, Tip Blight (Monilinia)	51.2 oz.	200 ppm	Apply delayed dormant spray in the spring. Repeat at 10 to 14 day intervals or as needed through pre-bloom.
Current, Gooseberry	Anthracnose, Leaf Spot	64 oz.	250 ppm	Make Initial application after first leaves have expanded Continue on a 10 to 14 day schedule or as needed during we conditions in the spring. Make an additional application afte harvest.
Raspberry	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 32 oz.	125 ppm	Make fall application after harvest. Apply delayed dorman spray after training in the spring. If needed, agricultural-type spray oil may be added.
	Anthracnose, Cane Spot, Leaf Spot, Purple Biotch, Yellow Rust	Low 19 2 oz.	75 ppm	Apply when leaf buds begin to open and repeat when flowe buds show white. If needed, agricultural-type spray oil may added. NOTE: Crop injury may occur if applied to foliage under certal environmental conditions such as hot or prolonged mois periods. Discontinue applications if signs of crop injury appear.
	A STATE OF THE PARTY OF THE PAR	**10.0 lb.		
Strawberry	Angular Leaf Spot (Xanthomonas), Leaf Blight, Leaf Scorch, Leaf Spot	19.2-25.6 oz	75-100 ppm	Begin application when plants are established and continue or weekly schedule throughout the season. Apply in at least 2 gallons of water. Use the higher rates when conditions favor disease. NOTE: Discontinue applications if signs of crop injury appear.
		**8.19 lbs		

**8.19 lbs

**Maximum Annual Load of copper applied per growing season. (lb Cu²+/A)*

Grape	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	19.2-32 oz.	75-125 ppm	Vines Begin applications at bud break with subsequent applications throughout the seasor depending on disease severity. Use the higher rates when conditions favor disease. NOTE: Foliage Injury may occur on copper sensitive varieties such as Concord Delaware, Niagara and Rosette.
Hops	Downy Mildew	19.2 oz.	75 ppm	Make crown treatments after pruning, but before training. After Training, additional treatments are needed at about 10 day intervals. NOTE: Discontinue use two weeks before harvest.
Kiwi	Erwinia herbicola, Psaudomonas flourescens, Psaudomonas syrinsae	38.4 oz.	150 ppm	Apply in 200 gallons of water per acre. Make applications on a monthly basis. // maximum of three applications may be made.

Т	**Maximum	Annual	Load o	of copper	applied	per	growing season	(1b Cu2+/A)2
				tillan	Hanna	-		

Crop	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Atemoya	Anthracnose	25.6-38.4 oz. **12.6 lb.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Carambola	Anthracnose	38.4-64 oz.	150-200 ppm	Make initial application before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Chives	Downy Mildew	19.2 oz.	75 ppm	Begin application when plants are established in the field. Repeativery 7 to 10 days or as needed depending on disease conditions.
Dill	Phoma Leaf Spot, Rhizoctonia Foliage Blight	19.2-25.6 oz. **3.95 lb.	75-100 ppm	Begin applications when plants are first established in the field and repeat at 7-10 day intervals or as needed depending on disease severity and environmental conditions. Use the higher rates for severe disease.
Guava	Anthracnose, Red Algae	25.6-38.4 oz **4.92 lb.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Litchi	Anthracnose	25.6-38.4 oz. **4.92 lb.	100-150 ppm	Make initial application just before flowering and repeat on a weekl schedule until just before harvest. Use the higher rates for seven disease.
Macadamia	Anthracnose	38.4-64 oz.	150-250 ppm	Initiate sprays at first sign of flowering and repeat on a weekly schedul- until just before harvest. Apply in sufficient water for thorougi coverage. Use the higher rates for severe disease.
	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea)	38.4 – 64 oz.	150-250 ppm	Apply during raceme development and bloom periods. Apply is sufficient water for thorough coverage. Use the higher rates when conditions favor disease?
Marney Sapote	Algal Leaf Spot	38.4-64oz.	150-250 ppm	Apply when conditions favor disease development. Repeat on a 14 to 30 schedule or as needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease.

Crop	Disease	Rate/Acre	Ppm's (copper) per 100 gallons	Instructions
Almond, Apricot, Cherry,	Bacterial Blast (Pseudomonas), Bacterial	51.2-64 oz.	of water 200-250 ppm	Make first application before fall rains and a second at late dormant. Use the higher rates whe conditions favor disease. If needed, agricultural-type spray oil may be added. For Cherries: Where disease is severe, an additional application shortly after harvest may be required.
Prune	Canker, Coryneum Blight (Shot Hole)		200 050	NOTE: Foliar injury may occur from post-bloom sprays on almonds, especially on NePlu varieties.
	Blossom Brown Rot, Coryneum Blight (Shot Hole)	51.2-84 oz. on almond, All others 60-90 oz.	200-250 ppm	Apply during early bloom. Do not apply after full bloom or injury may occur. Use the higher rate when rainfall is heavy and disease pressure is high.
	Black Knot* (Plum)	32-64 oz.	125-250 ppm	Make application at bud swell up to early bloom for early disease suppression. Apply before for bloom. Use the higher rates when rainfall is heavy and disease pressure is high.
	Cherry Leaf Spot* (Sour Cherries Only)	38.4-64 oz.	150-250 ppm	NOTE: To avoid plant injury, do not use after full bloom. Apply at petal fall as well as 1 to 2 times after petal fall. Use the lower rates where diseas infection is light and use the higher rates for a dormant application or where disease infection moderate to heavy. Do not apply to sweet cherry or the English Morello variety as severe injuril its east. NOTE: Moderate to severe injury such as leaf spotting and defoliation may occur from
	THE ALL VI	**18.0 lb.	1000	post bloom applications.
Apple	Anthracnose, Blossom Blast, European Canker (Necrie), Shoot Blast	51.2-64 oz.	200-250 ppm	Apply before fail rains. Use the higher rates when conditions favor disease. NOTE: Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.
	(Pseudomones) Apple Scab, Fire	High 51.2-64 oz.	200-250	Make application between silver-tip and green-tip. Apply as a full cover spray for early season
	Blight	51.2-64 OZ.	ppm	disease suppression. NOTE: Moderate to severe crop injury may occur from late application; discontinue use who green-tip reaches ¼ inch.
	Apple Scab	Low 19.2-32 oz.	75-125 ppm 75-100	Extended spray schedule where fruit finish is not a concern: Continued applications may be made at 5 to 7 day intervals or as needed between ½ inch green-tip and first cover spray.
	Fire Blight	19.2-32 oz.	75-100 ppm	NOTE: Moderate to severe crop injury may result from this extended spray schedule. It is not intended for fresh market apples or for apples where fruit finish is a concern as it is likely to cause fruit russetting.
	Collar Rot, Crown Rot	32 oz.	125 ppm	Mix 100 gallons of water. Apply 4 gallons of solution as a drench on the lower trunk area of each tree. Apply in early spring or in fall after harvest for beast results. Do not apply to foliage or fruit.
Avocado	Anthracnose, Blotch, Scab	51.2-64 oz.	200-250 ppm	Apply when bloom buds begin to swell and continue application at monthly intervals for five to a applications. Use the higher rates when conditions favor disease.
Banana	Sigatoka (Black and Yellow)	19.2 oz.	75 ppm	Apply by air in 3 gallons of water. If needed, agricultural-type spray oil may be added. Apply on 14 day schedule or as needed throughout the wet season. Apply at 21 day intervals or as neede
	Black Pitting	32 oz.	125 ppm	during dry periods. Mix 100 gallons of water. Apply to the fruit stem and the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.
Cacao	Black Pod	**18.9 lb. 19.2-64 oz. **15.75 lb.	75-250	Begin applications at the start of the rainy season and continue while infection conditions persis
Coffee	Coffee Berry Disease (Collectotrichum	38.4-84 oz.	150-250 ppm	Apply first spray after flowering and before onset of long rains and then at 21 to 28 day interval or as needed until ploking. Use the higher rates when conditions favor disease.
	coffeanum) Bacterial Blight (Pseudomones syringae)	38.4-64 oz.	150-250 ppm	Begin spray program before the onset of long rainy periods and continue throughout the rainy season at 14 to 21 day intervals or as needed. The critical time for spraying to control disease it just before, during and after flowering(s), especially when coinciding with wet weather. Use the
	Leaf Rust	19.2-32 oz.	75 ppm	higher rates when rainfall is heavy and disease pressure is high. Apply before the onset of rain and then at 21 day intervals or as needed while the rains continu
	(Hemileia vastatrix) Iron Spot	19.2 oz.	75 ppm	Use the higher rates when rainfall is heavy and disease pressure is high. Use concentrate or dilute spray. Begin treatment at the start of wet season and continue
	(Cercospora coffeicole), Pink Disease (Corticium salmonicolor)	**12.6 lb.	H	monthly intervals for three applications.
Filbert	Bacterial Blight	64-128 oz.	250-500 ppm	Apply as a post harvest spray. In seasons of heavy rainfall, apply a second spray when the fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disea pressure is high. If needed, agricultural-type spray oil may be added.
Mango	Anthracnose	**24.0 lb. 38.4-64 oz. **18.2 lb.	150-250	Apply monthly after fruit set until harvest. Use the higher rates when rainfall is heavy and disea
Olive	Olive Knot, Peacock Spot	64-76.8 oz.	250-300 ppm	pressure is high. Make first application before winter rains begin. A second application in early spring should made if disease is severe. Apply the higher rates for heavy disease pressure or when conditio favor disease development.
Peach, Nectarine	Bacterial Blast (Pseudomonas), Bacterial Canker, Bacterial Spot	**6.3 lb. 51.2-76.8 oz.	200-300 ppm	Make first application before fall rains and a second at late dormant. For peach leaf curt, it dormant application must be made before leaf buds swell. Use the higher rates when rainfall a disease pressure is high. If needed, agricultural-type spray oil may be added.
	(Xanthomonas), Coryneum Blight (Shot Hole), Leaf Curl	**18.0 lb.		
	Biossom Brown Rot, Coryneum Blight (Shot Hole), Leaf Curl	51.2-76.8 oz.	200-300 ppm	Full cover spray at pink bud. Use the higher rates when conditions favor disease.
	Bacterial Spot	19.20z.	75 ppm	Post-bloom application applied at first and second cover sprays. NOTE: Do not spray 3 weeks prior to harvest. Use only recommended rates. Spotting of leav and defoliation may occur from use in cover sprays.
Pear	Fire Blight	**18.8 lb. 19.2 oz.	75 ppm	Apply 5 day intervals or as needed throughout the bloom period. NOTE: Russetting may occur in copper sensitive varieties. Excessive dosages may cause fr
7000	Blossom Blast (Pseudomonas)	51.2-76.8 oz.	200-300 ppm	russet on any variety. Apply before fall rains and again during dormancy before spring growth starts. Use the high rates when disease pressure is high or when conditions favor disease development.
Pecan	Kernel Rot, Shuck Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella	**16.0 lb. 19.2-32 oz.	75-125 ppm	For suppression, apply in sufficient water to ensure complete spray coverage at 2 to 4 we intervals or as needed, starting at kernel growth and continue until shucks open. Use the high rates and shorter spray intervals if frequent rainfall occurs.
	pyramidalis) Ball Moss, Spanish Moss	38.4-64 cz.	150-250 ppm	Apply in 100 gallons of water in the spring when ball moss is actively growing, using 1 ½ gallo of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. The addition of
Pistachio	Botryosphaeria	**8.4 lb. 32-64 oz.	125-250	non-ionic surfactant will improve control. A second application may be required after 12 months Make initial application at bud swell and repeat on a 14 to 28 day schedule or as needed.
	Panicle and Shoot Blight, Botytris Blight, Late Blight (Aternaria aternata), Septoria Leaf Blight		ppm	disease conditions are severe, use the higher rates and shorter spray intervals.
Quince	Fire Blight	**8.4 lb. 19.2 oz.	75 ppm	Apply at 5 day intervals or as needed throughout the bloom period. Apply in adequate water
Welnut	Walnut Blight	**16.0 lb. 38.4-64 oz.	150-250 ppm	thorough coverage. Apply at first sprsy at early pre-bloom prior to or when catkins are partially expanded. Ma additional applications during bloom and early nutlet stage or as needed when frequent rainfall extended periods of moisture occur. Thorough coverage of catkins, leaves and nutlets easential for effective control.

Сгор	Disease	Rate/Acre	ppm's (copper) per 100 gallons of water	Instructions
Bean (Dry, Green)	Brown Spot, Common Blight, Halo Blight	19.2-25.6 oz.	75-100 ppm	For protective sprays, make first application when plants are 6 incher high, repeat on a 7 to 14 day schedule or as needed depending or environmental conditions. Use the higher rates for more severe disease.
Beet (Table Beet, Beet Greens)	Cercospora Leaf Spot	19.2-32 oz. **7.86 lb.	75-125 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use the higher rates when conditions favor disease.
Carrot	Alternaria Leaf Spot Cercospora Leaf Spot	19.2 oz.	76 ppm	Begin applications when disease first threatens and repeat at 7 to 14 day intervals or as needed depending on disease severity.
Celery, Celeriac	Bacterial Blight, Cercospora Early Blight, Septoria Late Blight	19.2 oz.	75 ppm	Begin applications as soon as plants are first established in the field repeating at 5 to 7 day intervals or as needed depending on disease severify and environmental conditions.
Crucifers (Broccoli, Sruesel Spieuto, Calebage, Cauliflower, Colard Greens Turnip Greens)	Black Leaf Spot (Alternia), Black Rot (Xarithomonas) Downey Mildew	19.2 – 25.6 oz.	75 – 100 ppm	Begin application after transplants are set in the field, or shortly after emergence of the field seeded crops or when conditions favor disease development. Apply at 7 to 10 intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on abbage.
Cucurbits (@n#sloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon)	Alternia Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Powdery Mildew, Watermeion Bacterial Fruit Blotch	19.2-25.6 oz.	75-100 ppm	Begin applications prior to disease development and continue while conditions are favorable for disease development. Repeat at 5 to 7 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.
Eggplant	(suppression) Alternaria Blight, Anthracnose, Phomopsis	19.2 oz.	75 ppm	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals or as needed depending on disease severity.
Okra	Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spot, Powdery Mildew	19.2-32 oz.	75 ppm	Begin treatment when disease first threatens and repeat every 5 to 10 days or as needed depending on disease severity. Use the higher rates and shorter spray intervals when conditions favor disease.
Onion, Garlic	Bacterial Blight, Downy Mildew, Purple Blotch	19.2 oz.	75 ppm	Begin when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals or as needed depending on disease severity. Can cause phytotoxicity to leaves.
Pea	Powdery Mildew	19.2-25.6 oz.	75-100 ppm	Begin applications when disease symptoms first appear and repea weekly intervals or as needed. Use the higher rates when conditions favor disease.
Pepper	Anthracnose, Bacterial Spot, Cercospora Leaf Spot	13-25 oz.	50-100 ppm	Begin applications when conditions first favor disease developmen and repeat at 7 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.
Spinach	Anthracnose, Blue Mold, Cercospora Leaf Spot, White Rust	19.2-25.6 oz.	76-100 ppm	Begin application when disease first appears or when conditions favo disease development. Repeat at 7 to 10 day intervals or as needed Use the higher rates when conditions favor disease. NOTE: Flecking may occur on spinach leeves.
Tomato	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leef Mold, Late Blight, Septoria Leaf Spot	19.2-32 oz.	75-125 ppm	Begin applications when disease first threatens and repeat at 5 to 1 day intervals or as needed depending on disease severity. Use this higher rates when conditions favor disease.
Watercress	Cercospora, Leaf Spot	**17.4 lb. 19.2 oz.	75 ppm	Begin applications when plants are first established in the field repeating at 7 to 14 day intervals or as needed depending on diseas severity. Do not exceed four applications per crop. Apply using groun spray equipment at no less than 50 gallons of spray solution per acre.

LIMITED WARRANTY AND LIMITATION OF REMEDIES

Seller warrants that the product conforms to the chemical description and is reasonably fit for the purpose stated on the label for use under normal conditions, but makes no other warranties of PITNESS or MERCHANTABILITY expressed or implied, or any other warranty if the product is used contrary to the label instructions or under abnormal conditions not foreseeable to the seller. In no case shall the seller be liable for more than the cost of the product to the buyer, and will in no event be liable for any consequential, special or indirect damages connected with the use or handling of this product. This product is offered and the buyer or user accepts it's subject to the foregoing terms which may not be varied

FOR EMERGENCY ASSISTANCE CALL

CHEMTREC - 1-800-424-9300

MAGNA-BON II, LLC. 1531 N.W. 25th Drive Okeechobee, FL 34972 863-357-0400

MATERIAL TO BE ADDED TO JACKET

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SUBM. DUE DATE 1-31-07
REVIEWER D. Fuller

CODING FORM FOR APPLICATIONS FOR REGISTRATION/AMENDMENTS

FILE SYMBOL/R	EG NO. 66675	- S PM	53	ACTION COD	E_307	
DESCRIPTOR				FQPA	NFQ	PA
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SCIENCE GROUP	DIVISION	BR	ANCH	SECTION	CSF Y/N	LABEL Y/N
CHEMISTRY	AD		EASSB	CTT		
EFFICACY	AD		EASSB	EET		



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON D.C., 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

John Kennedy c/o for Magna –Bon Agricultural Control Solutions 101 Beach Side Stevensville, MD 21666

Attention: John Kennedy Regulatory Specialist

FEB 9 200%

Subject:

Magna-Bon

EPA Reg. No. 66675-3

Amendment Dated October 1, 2007

The following amendment, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable pending that the following changes are incorporated:

- On page, in footnote #1, the statement should be reworded to state the following: "The language in parenthesis is only required on the bulk containers, not on retail containers..."
- On page 3, under the section Application, each time before the word "bacteria", the
 wording "odor causing" needs to be incorporated. Data has not been submitted to
 support this product as bactericide in swimming pools.. The word "bacteria" as used in
 this context, is broad and gives the impression that this product is efficacious against a
 variety of bacterium.
- Per the Copper Reregistration Eligibility Decision (RED) based on worker risks, the Agency recommends that you incorporate the required worker restricted entry interval (REI) of 48 hours instead of your current 24 hour restriction. EPA anticipates that this change will be mandatory soon for all product specific registrations that contain copper.
- On page 10, above the table, after the title "AMOUNT OF BAHAMA KLEAR PER VOLUME...", in parenthesis add the wording "(as Copper)".
- On page 10, after the table that is titled "AMOUNT OF BAHAMA KLEAR PER VOLUME..." you list an asterisk that states "ppm=parts per million". After the asterisk, add the wording "of copper".
- On page 10, in the table titled "CITRUS", in column 3 (ppm's per 100 gallons of water), after the abbreviation "ppm's" add in parenthesis the word, "copper".

• On pages 11-23, for each listing of crops, the following information should be incorporated for each commodity:

-Maximum annual load of copper (lbs Cu/A) per growing season -Minimum reentry interval

 On pages 11-23, in each column that is titled "ppm's per 100 gallons of water" after the abbreviation "ppm's" add in parenthesis the word "copper".

On pages 11-23, in each column that is titled "ppm's (copper) per 100 gallons of water" the rates listed (for all commodities) are incorrect. For example, alfalfa has a rate of copper per 100 gallons of water as 75 - 125 ppm. The Agency calculates this rate 35-55 ppm. Please recalculate each crop to correspond to the correct ppm value.

Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) and section 4(a) when the Agency requires all registrants of similar products to submit such data.

If the above conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the accepted labeling is enclosed. Submit three copies of your final printed labeling to the Agency before distributing or selling the product bearing the revised labeling.

If you have any questions concerning this letter, please contact Demson Fuller at (703) 308-8062.

Sincerely,

Marshall Swindell

Product Manager (33)

Regulatory Management Branch 1 Antimicrobials Division (7510C)

HIGHLIGHTED COPY

PROPOSED CHANGES HIGHLIGHTED IN RED and **BLUE TEXT with PINK TABS IDENTIFYING SPECIFIC** LOCATIONS of SUCH CHANGES

> ACCEPTED with COMMENTS in EPA Letter Dated: 9 2008

Under the Pederal Insecticide, Pungicide, and Rodenticide Act as emended, for the pesticide, registered under EPA Reg. No.

66675-3

MAGNA-BON **BAHAMA KLEAR** ALGICIDE/BACTERICIDE/FUNGICIDE

MASTER LABEL

Cover Page Page 0/24

BAHAMA KLEARTM Algicide/Bactericide/Fungicide

FOR SWIMMING POOLS, OUTDOOR HOT TUBS AND SPAS AND FOR USE ON RAW AGRICULTURAL

COMMODITIES

Ingredients

Copper Sulfate Pentahydrate*...(CAS 5578-99-8).......... 19.8% Other Ingredients 80.2% 100.0% Total

*Equivalent to 5.0% metallic copper A Chelated Copper Product

ACCEPTED with COMMENTS in EPA Letter Dated

9 2008

Under the Federal Insecticide, Prograde, and Rodenticide Act as emended, for the pesticide, registered under EPA Reg. Mg.

Keep Out Of the Reach of Children DANGER

66675-3

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a Poison Control Center or Doctor for treatment advice.
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or Doctor for treatment advice.
Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a Poison Control Center or Doctor for treatment advice.
Call a Poison Control Center or Doctor immediately for treatment advice. Have a person sip a glass of water, if able to swallow. Do not induce vomiting unless told to do so by the Poison Control Center or Doctor. Do not give anything by mouth to an unconscious person.

EPA REG. NO. 66675-3 EPA EST. NO. 66675-FL-001

Net Contents: 1 U.S. Gallon (3.78 Liters) - 9.9 lbs per U.S. Gallon (1.188 kg/l)

Manufactured by:

MAGNA-BON II. LLC 1531 NW 25th Drive Okeechobee, FL 34972 863-357-0400

For Emergency Assistance Call

CHEMTREC 1-800-424-9300

Amended August 7, 2007/ Page1 of 24 (1 This language is only required to appear on the bulk containers, not on retail containers. It will not appear on retail containers.)

This language is only required to appear on the bulk and non-household-use containers, not on household-use containers. It will not appear on household-use containers

In compliance with PR Notice 95-1, this effluent discharge statement will appear on containers that are equal to or greater than 50 lbs./5 gallons Per PR Notice 95-1, this language is not required for containers less than 50 pounds/5 gallons.

STORAGE AND DISPOSAL

Prohibition: Do not contaminate water, food or feed by storage or disposal.

Storage: Store in a safe place away from PETS AND KEEP OUT OF THE REACH OF CHILDREN. Store away from excessive heat. Magna-Bon Bahama Klear will freeze. Always keep container closed. Store Magna-Bon Bahama Klear in its original container only. [Bulk Magna-Bon Bahama Klear shall be stored and handled in 316L stainless steel, fiberglass, PVC's, polypropylenes or plastic equipment.] ¹ Keep away from galvanized pipe and any nylon storage handling equipment.

Pesticide Disposal: Excess Magna-Bon Bahama Klear should be disposed of through label use. Do not contaminate lakes, rivers or streams as this may cause fish kill. [Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.] ² In the event of a spill, neutralize with limestone or baking soda before disposal. Concentrate may deteriorate concrete.

Container Disposal: Do not reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved State and local procedures. [Rinsing and reuse of "totes" is permissible.] ¹

PRECAUTIONARY STATEMENTS Hazards To Humans And Domestic Animals

DANGER. Corrosive: Causes irreversible eye damage and skin irritation. Do not get into eyes or on clothing. Wear goggles or safety glasses. Harmful if swallowed, inhaled or absorbed through the skin. May cause allergic skin response. Avoid contact with skin. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. [Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.] ³

For Terrestrial Uses: This pesticide is toxic to fish and aquatic organisms. Do not apply directly to water or areas where surface water is present or to intertidal areas below the mean high mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

GENERAL INFORMATION

Magna-Bon Bahama Klear is a copper sulfate pentahydrate formulation used to control bacteria and algae in swimming pools and outdoor hot tubs and spas. It is used as a post harvest wash to control bacteria and fungi that cause spoilage in fruits and vegetables and is used on growing agricultural commodities to control bacteria and fungi.

Using water containing moderate to high amounts of sulfur may cause Magna-Bon Barrante Reservoir to neutralize. Whenever possible, use a compatibility jar test before mixing a whole taken Dated

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling

Pungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No.

66675-3

Amended August 7, 2007/ Page2 of 24

- 1 This language is only required to appear on the bulk containers, not on retail containers. It will not appear on retail containers.
- 2 This language is only required to appear on the bulk and non-household-use containers, not on household-use containers. It will not appear on household-use containers
- 3 In compliance with PR Notice 95-1, this effluent discharge statement will appear on containers that are equal to or greater than 50 lbs./5 gallons Per PR Notice 95-1, this language is not required for containers less than 50 pounds/5 gallons.

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Application:

For control of algae and bacteria in swimming pools, outdoor hot tubs and spas, add Magna-Bon Bahama Klear as per chart below.

	Water	Magna-Bon Bahama Klear
Swimming	15,000 Gal	1 – 3 Quarts
Pools:	30,000 Gal	2 - 6 Quarts
	60,000 Gal	4 -12 Quarts
Outdoor	235 Gal	1 Ounces
Hot Tubs	470 Gal	2 Ounces
and Spas:	700 Gal	3 Ounces

Application should be made before visible algae appear. Where visible algae is present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive build up of metallic copper. Magna-Bon Bahama Klear may be used at the higher rates to help control odors and algae during the winter months while the pool is not being used. Recommended application rates yield (1) ppm to 3 ppm) metallic copper.

To control algae and bacteria in swimming pools, spas & hot tubs; Apply at the rate of 2 - 4 quarts of Magna-Bon Bahama Klear per 60,000 gallons. This will provide a level of 0.5 ppm to 1.0 ppm metallic copper. Application should be made before visible algae appear. Where visible algae are present, apply at the higher rate. For maintenance dosages and where visible algae are not present, use the lower rate. Repeat maintenance dosages to maintain the recommended concentration and avoid excessive buildup of metallic copper. Magna-Bon Bahama Klear may be used to help control pool odors and algae during winter months. Maintain the higher rate while the pool is not being used during the winter. Do not discharge treated pool effluent where it will drain into lakes, streams, ponds, or public water.]

General Algae/Bacteria Control:

For suppression of bacterial odors and for control of algae, apply in late spring or early summer when algae and bacteria first appear. The dosages are variable and depend upon algae/bacteria species, water hardness, water temperature, amount of algae/bacteria present, as well as whether water is clear. turbid, flowing or static. Preferably, the water should be clear with the temperature above 60 °F or 15.6 °C. Higher dosages are required at lower temperatures, higher algae/bacteria concentration, and for hard waters. Application should be done by pouring Magna-Bon Bahama Klear directly from the container into the pool, outdoor hot tub or spa. Several application points speed up dispersal. Static water requires less chemical for algae/bacteria control than does flowing water. Use higher dosages for Chara, Nitella and filamentous algae (pond scum), and lower dosages for planktonic algae. If there is uncertainty about the dosage, begin with a lower dose and increase until control is achieved, or until the maximum allowable level has been reached.

> ACCEPTED with COMMENTS in EPA Letter Dated

9 2008 FEB

Under the Pederal Insecticide, Pungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. Ma.

66675-3

Amended August 7, 2007/ Page3 of 24

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For Use as a Post Harvest Wash an Agricultural Commodities: To use as an algicide, bactericide, fungicide post harvest wash the following directions apply.

For use as a post harvest wash, this product may be applied with any type of application equipment that gives thorough and uniform coverage. Devices may include, but are not limited to, dunk and dip tanks. spray applicators or fogging.

Washing raw agricultural commodities will both clean and control bacteria and fungi that cause spoilage. Depending on water quality and cleaning conditions, or when adding new processing water, add from one hundred three (103) up to one hundred twenty eight (128) fluid ounces of Magna-Bon Bahama Klear per one thousand (1,000) gallons of water. Allow thorough coverage of the commodity and then let dry. Rinsing is not required or recommended.

Depending on water quality, cleaning conditions or when adding new processing water, start at lower rinse rates. Add Bahama Klear as per the chart below.

BAHAMA KLEAR

RINSE WATER

25.6 ounces to 32 ounces 51.2 ounces to 64 ounces 103 ounces to 128 ounces

250 gallons 500 gallons 1.000 gallons

Remember: Commodities need only be immersed long enough to allow complete coverage.

FOR USE AS A FUNGICIDE/BACTERICIDE ON GROWING AGRICULTURAL COMMODITIES: For use as a systemic fungicide/bactericide on growing agricultural commodities, the following directions apply.

GENERAL INSTRUCTIONS

Bahama Klear may be applied with any type of application equipment that gives uniform coverage of all foliage, including ground, aerial and low volume sprayers as specified on this label. Equipment used for application should be PVC or 316L stainless steel. Bahama Klear is compatible with most fungal and insecticidal biopesticides when applied at least two (2) days before or after application of the biopesticide. Phytotoxicity - Although Bahama Klear has been tested on a wide variety of fruits, vegetables and nuts without phytotoxicity, there could be some varieties and cultivars that because of environmental factors and stages of growth could possibly foster systems. The per acre use rate of Bahama Klear is applicable for dilute spraying. Depending on the equipment used and the specific crop, the spray volume applied per acre will differ. Refer to the Minimum Recommended Spray Volume Table. Complete spray coverage is essential to assure optimum performance from Bahama Klear. When treating by aerial application or with low volume application equipment, unless you have had specific previous experience, it is advisable to test for compatibility and tolerance to crop injury prior to full scale commercial utilization.

Consult Bahama Klear label for specific rates and timing of application by crop. Where application rates and intervals are provided in a range (e.g., 2-4 fluid ounces and 7 to 10 days) the higher rates and shorter spray time intervals are recommended when rainfall is heavy and/or disease pressure is high. Use the higher rates for large mature tree crops. The use of a surfactant, such as Cell-U-Wett™ is acceptable for plants having waxy or hairy surfaces. Bahama Klear works via surface contact with the plants and materials being treated. It is important to ensure that all surfaces are thoroughly wetted. Bahama Klear does not produce any visible residue or have a distinct odor that all surfaces are thoroughly wetted. Bahama Klear does not produce any visible residue or have a distinct odor that all surfaces are thoroughly wetted. Bahama Klear does not produce any visible residue or have a distinct odor that all surfaces are thoroughly wetted. Bahama Klear does not produce any visible residue or have a distinct odor that all surfaces are thoroughly wetted. in EPA Letter Dated with a surfactant.

Under the Pederal Insecticide, Pungicide, and Rodenticide Act as CCG 75-5
registered under August 7, 2007/ Page4 of 24

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SPECIAL PRECAUTIONS

- Do not mix with acidic compounds such as Alliette™ within 14 days before or after application of
- This product may be reactive on masonry and metal surfaces such as galvanized roofing. Avoid contact with metal surfaces. Do not spray on cars, houses, lawn furniture, etc.
- Environmental conditions such as extended periods of wet weather, acid rain, etc., which alter the pH of the leaf surface may effect the performance of Bahama Klear resulting in possible phytotoxicity or loss of effectiveness.
- Do not mix with pot ash.
- It must be determined in the selection process if proper application equipment is available and if the waste associated with its use can be properly handled. Materials used on the construction of application equipment is also an important factor as agricultural chemicals are often reactive with soft metals such as aluminum and even some synthetic materials such as plastics, rubbers, etc... Therefore it is necessary when working with equipment containing these materials, that they are thoroughly flushed with clean water after each days use.

Personal Protective Equipment

Personal Protective Equipment: Some materials that are chemical-resistant to this product are listed below. Applicators and other handlers must wear: ACCEPTED

Long sleeved shirt

Long pants

in EPA Letter Dated Chemical resistant gloves made of barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride or viton

Protective eyewear

Shoes plus socks

Under the Federal Insecticide, Pungicide, and Rodenticide Act as

WITH COMMENTS

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for cleaning and maintaining PPE. washables, use detergent and hot water. Keep and wash PPE separately from other EPA Reg. No 66675-3

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard. 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Workers Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, water, is: coveralls, protective eyewear, chemical resistant gloves, and shoes plus socks.

Amended August 7, 2007/ Page5 of 24

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NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Workers Protection Standard for agricultural pesticides, 40 CFR part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Do not allow re-entry into treated areas until sprays have dried.

GENERAL CHEMIGATION INSTRUCTIONS

Apply this product only through one or more of the following types of systems: Sprinkler including center pivot, lateral move, end row, side (wheel) roll, traveler, big gun, solid set or hand move: flood (basin); furrow; border or drip (trickle) irrigation and system(s). Do not apply this product through any other type of irrigation systems.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety device for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Posting areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds or other public facilities not including public roads, or 2) when chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters of at least 2 ½ inches tall, and all letters and the symbol shall be in a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter contractory of STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER. The COMMENTS IN IRRIGATION WATER.

This sign is in addition to any sign posted to comply with the Workers Protection Standard. 9 2008

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SINGERIAL Sederal Insecticide,

Public water system means a system for the provision to the public of piped water registered and Rodenticide Act as consumption if such system has at least 15 service connections or regularly servers and average periode as 25 individuals daily at least 60 days out of the year.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be

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CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER Cont'd.

discharged into a reservoir tank prior to pesticide introduction. There shall be a complete break (air gap) between the flow outlet end of the fill pipe and the top of the overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of liquid back toward the injection.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

When mixing, agitation is not necessary. Adjust the pH of the water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add Bahama Klear last. If compatibility is in compatibility is in compatibility is in compatibility in test before mixing a whole tank. Because of a wide variety of possible compatibility is in Rodenticide. Act as which can be encountered, observe all cautions and limitations on the label of all products discontinuous test and in the particide, mixtures.

Bahama Klear may be added through a traveling system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

SPRINKLER CHEMIGATION

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement pump (i.e., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Amended August 7, 2007/ Page7 of 24

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in EPA Letter Dated

MCCEPTED
with COMMENTS
in EPA Letter Dated:

SPRINKLER CHEMIGATION Cont'd.

Under the Welch Trisingcide Italian is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, Pungicide, and Recentification is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, Pungicide, and Recentification is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, Pungicide, and Recentification is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, Pungicide, and Recentification is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, Pungicide, and Recentification is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, Pungicide, and Recentification is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, Pungicide, and Recentification is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, Pungicide, and Recentification is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, Pungicide, and Recentification is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, Pungicide, and Recentification is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, Pungicide, and Recentification is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, and the pH of the carrier water to 7 or below. If using stickers, and the pH of the carrier water to 7 or below. If using stickers, and the pH of the carrier water to 7 or below. If using stickers, and the pH of the carrier water to 7 or below. If using stickers, and the pH of the carrier water to 7 or below. If using stickers, and the pH of the carrier water to 7 or below. If using stickers, and the pH of the carrier water to 7 or below. If using stickers, and the pH of the carrier water to 7 or below. If using stickers, and the pH of the carrier water to 7 or below. If using stickers, and the pH of the carrier water

May be added through a traveling irrigation system or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

FLOOR (BASIN), FURROW AND BORDER CHEMIGATION

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination back flow.
- b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of liquid back toward the injection pump.
- c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- f. Systems must use a metering pump, such as a positive displacement pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

When mixing, agitation is not necessary. Adjust the pH of the carrier water to 7 or below. If using stickers, spreaders, insecticides, nutrients, etc., add the Bahama Klear last. If compatibility is in question, use a compatibility jar test before mixing a whole tank. Because of a wide variety of possible combinations which can be encountered, observe all cautions and limitations on the labels of all products used on the mixtures.

Bahama Klear may be added through a traveling irrigation system continuously or at the last 30 minutes of solid set or hand moved irrigation systems. Bahama Klear readily disperses and needs no agitation.

DRIP (TRICKLE) CHEMIGATION

The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.

The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of liquid back toward the injection pump.

Amended August 7, 2007/ Page8 of 24

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DRIP (TRICKLE) CHEMIGATION Cont'd.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor pump stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump such as a positive displacement injection pump (i.e. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

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FOR SPRAY AND SOIL DRENCH APPLICATIONS

Always spray for total foliage coverage. When re-spraying the rates and severity of the disease vary with unforeseen conditions. However, in the event of severe disease, spraying intervals can be shortened to 3 to 5 days. At times, lower rates can be as effective as higher rates and should be tried first. Usually, preventive programs may be maintained at lower rates. Use of low volume spraying is effective against Botrytis and not effective against established powdery mildew and Xanthomonas infections. Also, applications on actively growing tissue may be more effective than applications on dormant tissue.

MINIMUM RECOMMENDED SPRAY VOLUME (GALLONS) PER ACRE WHEN APPLYING BAHAMA KLEAR

WILL ALL LING DALIAMA RELAK						
		GROUND				
CROP	AERIAL	DILUTE	CONCENTRATE*			
Vegetables	3	20	30			
Field Crops	3	20	30			
Small Fruits	5	150	30			
Vines	5	150	30			
Tree Crops	10	400	50			
Citrus	10	125	30			

*Pesticide application equipment such as Curtec® or other similar sprayers which are calculated obtaining coverage at low volumes may be used at as low as 20 gpa of spray volumes. The following specific instructions are based on general application procedures. The pared recommendations of the State Extension Service should be closely followed as to timing, frequency and numbers of sprays per season.

Under the Pederal Insecticide, Pungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No

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FROST INJURY PROTECTION **BACTERIAL ICE NUCLEATION INHIBITOR**

Application of Bahama Klear made to all crops listed on this label at rates and stages of growth indicated on this label, at least 24 hours prior to anticipated frost conditions, will afford control of ice nucleating bacteria (Pseudomonas syringae, Erwinia herbicola and Pseudomonas flourescens) and may therefore provide some protection against light frost. Not recommended for those geographical areas where weather conditions favor severe frost.

The chart below is used to calculate correct ppm's* of active ingredient (A.I.) per volume of carrier water. These volumes can be used for either conventional or concentrated sprays.

AMOUNT OF BAHAMA KLEAR PER VOLUME OF WATER
FOR PROPER PPM'S* OF APPLIED ACTIVE INGREDIENT (45 CODEC)

ppm's* of	30 gallons	50 gallons	100 gallons	125 gallons	250 gallons	500 gallons
A.I.	per acre	per Acre	per Acre	per Acre	per Acre	per Acre
50	3.85 oz.	6.4 oz.	12.8 oz.	16 oz.	32 oz.	64 oz.
75	5.78 oz.	9.6 oz.	19.2 oz.	24 oz.	48 oz.	96 oz.
100	7.70 oz.	12.8 oz.	25.6 oz.	32. oz.	64 oz.	1 gal.
125	9.6 oz.	16 oz.	32 oz.	40 oz.	80 oz.	1.25 gal.
150	11.5 oz.	19.2 oz.	38.4 oz.	48 oz.	96 oz.	1.5 gal.
200	15.4 oz.	25.6 oz.	51.2 oz.	64 oz.	1 gal.	2 gal.
250	19.2 oz.	32 oz.	64 oz.	80 oz.	1.25 gal.	2.5 gal.

* ppm = parts per million (4 > Copper)

(Copper) CITRUS
Grapefruit, Kumquat, Lemon, Lime, Orange, Tangelo, Tangerine

Disease	Rate per Acre	ppm's per 100 gallons of water	Instructions
Brown Rot	30-70 oz.	120-275 ppm	Apply at first indication of rain or first appearance of Brown Rot. Re-apply as needed during wet weather.
Greasy Spot, Pink Pitting	25.6-64 oz.	100-250 ppm	Apply during mid-summer.
Scab	25.6-64 oz.	100-250 ppm	Apply shortly before trees begin to flush. Re-apply at 2/3 petal fall. Re-apply 4 weeks later, if necessary.
Melanose	25.6-64 oz.	100-250 ppm	Apply 2 times per year before the onset of spring and autumn rains.
Canker (Suppression) ACCEPTED ACCEPTED ACCEPTED B 9	12.8-64 oz.	50-250 ppm	Spray flushes 7 to 14 days after shoots begin to grow. Young fruit may require additional applications. Number and timing of applications will be dependent on disease pressure. Under heavy pressure, each new flush of growth should be sprayed. Heavily infected trees should be sprayed with a minimum dosage of 250 ppm with a follow up spray after 7-14 days at 200 ppm.

Under the Pederal Insecticide, Pingicide, and Rodenticide Act amended, for the pesticide, registered under EPA Reg. No. 66675-3

Amended August 7, 2007/ Page 10 of 24

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FIELD CROPS

Crop	Disease	Rate/Acre	ppm's per 100 gallons of water	Instructions
Alfalfa	Cercospora Leaf Spot, Leptosphaerulina Leaf Spot	9-14 oz.	75-125 ppm	Apply 10 to 14 days before each harvest or earlier if disease threatens. NOTE: Spray injury may occur with sensitive varieties such as Lahontan.
Corn (Field Corn, Popcorn, Sweet corn)	Bacterial Stalk Rot	10-30 oz.	75-125 ppm	Begin treatment when disease first appears and repeat every 7 to 10 days or as needed. Use the higher rates and shorter spray intervals when conditions favor disease.
Peanut	Cercospora leaf Spot	10-23 oz.	75-100 ppm	Begin spraying at 35 to 40 days after planting or when disease symptoms first appear and repeat at 10 to 14 day intervals or as needed. Reduce sprays to 7 day intervals during humid weather. Use the higher rates when conditions favor disease.
Potato	Early Blight, Late Blight	8-30 oz.	75-125 ppm	Apply 75 to 125 ppm at 7 to 10 day intervals or as needed starting when plants are 2 to 6 inches high in locations where disease is light. Add up to 32 oz. per acre when disease is more severe.
Sugar Beets	Cercospora Leaf Spot	15-38 oz.	75-150 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use higher rates when conditions favor disease. Addition of a sticker/spreader is recommended.
Wheat, Barley, Oats	Helminthosporium Spot Blotch, Septoria Leaf Blotch	10-15 oz.	75-100 ppm	Make First application at early heading and follow with second spray 10 days later. Use the higher rates when conditions favor disease.

ACCEPTED with COMMENTS in EPA Letter Dated

FEB 9 2008

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No.

66675-3

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SMALL FRUITS

Crop	Disease	Rate/Acre	ppm's per 100 gallons of water	Instructions
Blackberry (Aurora, Boysen, Cascade, Chehalem,	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 30 oz.	125 ppm	Make fall application after harvest. Apply delayed dormant spray after pruning/training in the spring. If needed, agricultural-type spray oil may be added.
Logan, Marion, Santiam, Thornless Evergreen)	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	Low 15 oz.	75 ppm	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
Blueberry	Bacterial Canker	30-45 oz.	125-200 ppm	Make application before fall rains and a second application 4 weeks later. Use the higher rates when conditions favor disease.
	Fruit Rot, Phomopsis Twig Blight	20-40 oz.	100-200 ppm	Dormant Application: Begin applications when bloom buds begin to swell. Make additional applications at 10 to 14 day intervals or as needed before blooms open.
Cranberry	Fruit Rot	45 oz.	200 ppm	Make application in late bloom. Apply one or two additional applications at 10 to 14 day intervals or as needed depending on disease severity.
	Rose Bloom	45 oz.	200 ppm	Apply three sprays on 10 to 14 day schedule or as needed as soon as symptoms are observed.
	Bacterial Stem Canker	45 oz.	200 ppm	Apply post harvest and again in spring at bud swell. Apply one or two additional applications at 10 to 14 intervals or as needed depending on disease severity.
	Leaf Blight, Red Leaf Spot, Stem Blight, Tip Blight (Monilinia)	ACCEP with COM in EPA Lett	MENTS	Apply delayed dormant spray in the spring. Repeat at 10 to 14 day intervals or as needed through pre-bloom.

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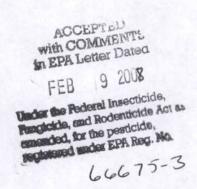
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SMALL FRUITS (cont'd)

Crop	Disease	Rate/Acre	ppm's per 100 gallons of water	Instructions
Currant, Gooseberry	Anthracnose, Leaf Spot	60 oz.	250 ppm	Make Initial application after first leaves have expanded. Continue on a 10 to 14 day schedule or as needed during wet conditions in the spring. Make an additional application after harvest.
Raspberry	Anthracnose, Cane Spot, Leaf Spot, Pseudomonas Blight, Purple Blotch, Yellow Rust	High 30 oz.	125 ppm	Make fall application after harvest. Apply delayed dormant spray after training in the spring. If needed, agricultural-type spray oil may be added.
	Anthracnose, Cane Spot, Leaf Spot, Purple Blotch, Yellow Rust	Low 15 oz.	75 ppm	Apply when leaf buds begin to open and repeat when flower buds show white. If needed, agricultural-type spray oil may be added. NOTE: Crop injury may occur if applied to foliage under certain environmental conditions such as hot or prolonged moist periods. Discontinue applications if signs of crop injury appear.
Strawberry	Angular Leaf Spot (Xanthomonas), Leaf Blight, Leaf Scorch, Leaf Spot	15 25 oz.	75-100 ppm	Begin application when plants are established and continue on a weekly schedule throughout the season. Apply in at least 20 gallons of water. Use the higher rates when conditions favor disease. NOTE: Discontinue applications if signs of crop injury appear.



Amended August 7, 2007/ Page 13 of 24

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TREE CROPS

Crop	Disease	Rate/Acre	ppm's per 100 gallons of water	Instructions
Almond, Apricot, Cherry, Plum Prune	Bacterial Blast (Pseudomonas), Bacterial Canker, Coryneum Blight (Shot Hole)	45 - 85 oz.	200-250 ppm	Make first application before fall rains and a second at late dormant. Use the higher rates when conditions favor disease. If needed, agricultural-type spray oil may be added. For Cherries: Where disease is severe, an additional application shortly after harvest may be required. NOTE: Foliar injury may occur from post-bloom sprays on almonds, especially on NePlus varieties.
	Blossom Brown Rot, Coryneum Blight (Shot Hole)	45 – 60 oz. on almond, All others 60-90 oz.	200-250 ppm	Apply during early bloom. Do not apply after full bloom or injury may occur. Use the higher rates when rainfall is heavy and disease pressure is high.
	Black Knot* (Plum)	30-60 oz.	125-250 ppm	Make application at bud swell up to early bloom for early disease suppression. Apply before full bloom. Use the higher rates when rainfall is heavy and disease pressure is high. NOTE: To avoid plant injury, do not use after full bloom.
	Cherry Leaf Spot* (Sour Cherries Only)	40-60 oz.	150-250 ppm	Apply at petal fall as well as 1 to 2 times after petal fall. Use the lower rates where disease infection is light and use the higher rates for a dormant application or where disease infection is moderate to heavy. Do not apply to sweet cherry or the English Morello variety as severe injury will result. NOTE: Moderate to severe injury such as leaf spotting and defoliation may occur from post bloom applications.



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Amended August 7, 2007/ Page14 of 24

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Crop	Disease	Rate/Acre	ppm's per 100 gallons of water	Instructions
Apple	Anthracnose, Blossom Blast, European Canker (Necria), Shoot Blast (Pseudomonas)	90-128 oz.	200-250 ppm	Apply before fall rains. Use the higher rates when conditions favor disease. NOTE: Use on yellow varieties may cause discoloration. To avoid discoloration, pick before spraying.
	Apple Scab, Fire Blight	High 60-128 oz.	200-250 ppm	Make application between silver- tip and green-tip. Apply as a full cover spray for early season disease suppression. NOTE: Moderate to severe crop injury may occur from late application; discontinue use when green-tip reaches ½ inch.
	Apple Scab	Low15-30 oz.	75-125 ppm	Extended spray schedule where fruit finish is not a concern:
	Fire Blight	Low 8-15 oz.	75-100 ppm	Continued applications may be made at 5 to 7 day intervals or as needed between ½ inch green-tip and first cover spray. NOTE: Moderate to severe crop injury may result from this extended spray schedule. It is not intended for fresh market apples or for apples where fruit finish is a concern as it is likely to cause fruit russetting.
	Collar Rot, Crown Rot	30 oz.	125 ppm	Mix 100 gallons of water. Apply 4 gallons of solution as a drench on the lower trunk area of each tree. Apply in early spring or in fall after harvest for beast results. Do not apply to foliage or fruit.
Avocado	Anthracnose, Blotch, Scab	60-90 oz. ACCEPTE	200-250 ppm	Apply when bloom buds begin to swell and continue application at monthly intervals for five to six applications. Use the higher rates when conditions favor disease.

in EPA Letter Dated

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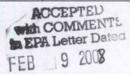
Amended August 7, 2007/ Page 15 of 24

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Crop	Disease	Rate/Acre	ppm's per 100 gallons of water	Instructions
Banana	Sigatoka (Black and Yellow)	15 oz.	75 ppm	Apply by air in 3 gallons of water. If needed, agricultural-type spray oil may be added. Apply on a 14 day schedule or as needed throughout the wet season. Apply at 21 day intervals or as needed during dry periods.
	Black Pitting	30 oz.	125 ppm	Mix 100 gallons of water. Apply to the fruit stem and the basal portion of the leaf crown. Apply during the first and second weeks after fruit emergence.
Cacao	Black Pod	15-60 oz.	75-250 ppm	Begin applications at the start of the rainy season and continue while infection conditions persist.
(Collectotrichu coffeanum) Bacterial Bligh (Pseudomona:	Coffee Berry Disease (Collectotrichum coffeanum)	40-60 oz.	150-250 ppm	Apply first spray after flowering and before onset of long rains and then at 21 to 28 day intervals or as needed until picking. Use the higher rates when conditions favo disease.
	Bacterial Blight (Pseudomonas syringae)	40-60 oz.	150-250 ppm	Begin spray program before the onset of long rainy periods and continue throughout the rainy season at 14 to 21 day intervals o as needed. The critical time for spraying to control disease is just before, during and after flowering(s), especially when coinciding with wet weather. Use the higher rates when rainfall is heavy and disease pressure is high.
	Leaf Rust (Hemileia vastatrix)	15-30 oz.	75 ppm	Apply before the onset of rain and then at 21 day intervals or as needed while the rains continue. Use the higher rates when rainfall is heavy and disease pressure is high.



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Crop	Disease	Rate/Acre	ppm's per 100 gallons of water	Instructions
Coffee	Iron Spot (Cercospora coffeicola), Pink Disease (Corticium salmonicolor)	15 oz.	75 ppm	Use concentrate or dilute spray. Begin treatment at the start of well season and continue at monthly intervals for three applications
Filbert	Bacterial Blight	120-180 oz.	250-500 ppm	Apply as a post harvest spray. In seasons of heavy rainfall, apply a second spray when three fourths of the leaves have dropped. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added.
	Eastern Filbert Blight	120-180oz.	250-500 ppm	Apply as a dilute spray in adequate water for thorough coverage. Make applications starting at bud swell to bud break and continue at 2 week intervals or as needed until early May. Thorough coverage is essential. Use the higher rates when rainfall is heavy and disease pressure is high. If needed, agricultural-type spray oil may be added.
Mango	Anthracnose	45-65 oz.	150-250 ppm	Apply monthly after fruit set until harvest. Use the higher rates when rainfall is heavy and disease pressure is high.
Olive	Olive Knot, Peacock Spot	60-90 oz.	250-300 ppm	Make first application before winter rains begin. A second application in early spring should be made if disease is severe. Apply the higher rates for heavy disease pressure or when conditions favor disease development.
Peach, Nectarine	Bacterial Blast (Pseudomonas), Bacterial Canker, Bacterial Spot (Xanthomonas), Coryneum Blight (Shot Hole), Leaf Curl	ACCEPTE with COMM in EPA Letter	Dated	Make first application before fall rains and a second at late dormant. For peach leaf curl, late dormant application must be made before leaf buds swell. Use the higher rates when rainfall and disease pressure is high. If needed, agricultural-type spray oil may be added.

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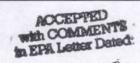
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Crop	Disease	Rate/Acre	ppm's per 100 gallons of water	Instructions
Peach, Nectarine	Blossom Brown Rot, Coryneum Blight (Shot Hole), Leaf Curl	45-90 oz.	200-300 ppm	Full cover spray at pink bud. Use the higher rates when conditions favor disease.
	Bacterial Spot	8 oz.	75 ppm	Post-bloom application applied at first and second cover sprays. NOTE: do not spray 3 weeks prior to harvest. Use only recommended rates. Spotting of leaves and defoliation may occur from use in cover sprays.
Pear	Fire Blight	8 oz.	75 ppm	Apply 5 day intervals or as needed throughout the bloom period. NOTE: Russetting may occur in copper sensitive varieties. Excessive dosages may cause fruit russet on any variety.
	Blossom Blast (Pseudomonas)	45-90 oz.	200-300 ppm	Apply before fall rains and again during dormancy before spring growth starts. Use the higher rates when disease pressure is high or when conditions favor disease development.
Pecan	Kernel Rot, Shuck Rot (Phytophthora cactorum), Zonate Leaf Spot (Cristulariella pyramidalis)	15-30 oz.	75-125 ppm	For suppression, apply in sufficient water to ensure complete spray coverage at 2 to 4 week intervals or as needed, starting at kernel growth and continue until shucks open. Use the higher rates and shorter spray intervals if frequent rainfall occurs.
	Ball Moss, Spanish Moss	40-60 oz.	150-250 ppm	Apply in 100 gallons of water in the spring when ball moss is actively growing, using 1 ½ gallons of spray per foot of tree height. Make sure to wet ball moss tufts thoroughly. The addition of a non-ionic surfactant will improve control. A second application may be required after 12 months.



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Amended August 7, 2007/ Page 18 of 24

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Crop	Disease	Rate/Acre	ppm's per 100 gallons of water	Instructions
Pistachio	Botryosphaeria Panicle and Shoot Blight, Botytris Blight, Late Blight (<i>Alternaria</i> <i>alternata</i>), Septoria Leaf Blight	30-60 oz.	125-250 ppm	Make initial application at bud swell and repeat on a 14 to 28 day schedule or as needed. If disease conditions are severe, use the higher rates and shorter spray intervals.
Quince	Fire Blight	15 oz.	75 ppm	Apply at 5 day intervals or as needed throughout the bloom period. Apply in adequate water for thorough coverage.
Walnut	Walnut Blight	45-65 oz.	150-250 ppm	Apply at first spray at early pre-bloom prior to or when catkins are partially expanded. Make additional applications during bloom and early nutlet stage or as needed when frequent rainfall or extended periods of moisture occur. Thorough coverage of catkins, leaves and nutlets is essential for effective control. NOTE: Adequate control may not be obtained when copper tolerant species of <i>Xanthomonas</i> bacteria are present.

VEGETABLES

	VEGETABLEG							
Crop	Disease	Rate/Acre	ppm's per 100 gallons of water	Instructions				
Bean (Dry, Green)	Brown Spot, Common Blight, Halo Blight	8-25 oz.	75-100 ppm	For protective sprays, make first application when plants are 6 inches high; repeat on a 7 to 14 day schedule or as needed depending on environmental conditions. Use the higher rates for more severe disease.				
Beet (Table Beet, Beet Greens)	Cercospora Leaf Spot	15-30 oz.	75-125 ppm	Begin applications when conditions first favor disease development and repeat at 10 to 14 day intervals or as needed. Use the higher rates when conditions favor disease.				
Carrot	Alternaria Leaf Spot, Cercospora Leaf Spot	switch CO	75 ppm PTEI) OMENTS stor Dated:	Begin applications when disease first threatens and repeat at 7 to 14 day intervals or as needed depending on disease severity.				

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VEGETABLES (cont'd)

Crop	Disease	Rate	ppm's per 100 gallons of water	Instructions
Celery, Celeriac	Bacterial Blight, Cercospora Early Blight, Septoria Late Blight	15 oz.	75 ppm	Begin applications as soon as plants are first established in the field, repeating at 5 to 7 day intervals or as needed depending on disease severity and environmental conditions.
Crucifers (Broccoli, Brussel Sprout, Cabbage, Cauliflower, Collard Greens, Mustard Greens, Turnip Greens)	Black Leaf Spot (Alternia), Black Rot (Xanthomonas), Downy Mildew	8-15 oz.	75-100 ppm	Begin application after transplants are set in the field, or shortly after emergence of field seeded crops or when conditions favor disease development. Apply at 7 to 10 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Reddening of older leaves may occur on broccoli and a flecking of wrapper leaves may occur on cabbage.
Cucurbits (Cantaloupe, Cucumber, Honeydew, Muskmelon, Pumpkin, Squash, Watermelon)	Alternia Leaf Spot, Angular Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Powdery Mildew, Watermelon Bacterial Fruit Blotch (suppression)	10-25 oz.	75-100 ppm	Begin applications prior to disease development and continue while conditions are favorable for disease development. Repeat at 5 to 7 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Crop injury may occur from application at higher rates and shorter intervals. Discontinue use if injury occurs.
Eggplant	Alternaria Blight, Anthracnose, Phomopsis	15 oz.	75 ppm	Begin applications prior to development of disease symptoms. Repeat sprays at 7 to 10 day intervals or as needed depending on disease severity.
Okra	Anthracnose, Bacterial Leaf Spot, Leaf Spots, Pod Spot, Powdery Mildew	15-30 oz.	75 ppm	Begin treatment when disease firs threatens and repeat every 5 to 10 days or as needed depending on disease severity. Use the higher rates and shorter spray intervals when conditions favor disease.

ACCEPTED with COMMENTS in EPA Letter Dared

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VEGETABLES (cont'd)

Crop	Disease	Rate	ppm's per 100 gallons of water	Instructions			
Onion, Garlic	Bacterial Blight, Downy Mildew, Purple Blotch	15 oz.	75 ppm	Begin when plants are 4 to 6 inches high and repeat at 7 to 10 day intervals or as needed depending on disease severity. Can cause phytotoxicity to leaves.			
Pea	Powdery Mildew	10-25 oz.	Begin applications when disease symptoms first appear and repeat weekly intervals or as needed. Use the higher rates when conditions favor disease.				
Pepper	Pepper Anthracnose, Bacterial Spot, Cercospora Leaf Spot 15-25 oz. 75-100 ppm			Begin applications when conditions first favor disease development and repeat at 7 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.			
Spinach	Anthracnose, Blue Mold, Cercospora Leaf Spot, White Rust		75-100 ppm	Begin application when disease first appears or when conditions favor disease development. Repeat at 7 to 10 day intervals or as needed. Use the higher rates when conditions favor disease. NOTE: Flecking may occur on spinach leaves.			
Tomato	Anthracnose, Bacterial Speck, Bacterial Spot, Early Blight, Gray Leaf Mold, Late Blight, Septoria Leaf Spot	10-30 oz.	75-125 ppm	Begin applications when disease first threatens and repeat at 5 to 10 day intervals or as needed depending on disease severity. Use the higher rates when conditions favor disease.			
Watercress	Cercospora, Leaf Spot	15 oz.	75 ppm	Begin applications when plants are first established in the field, repeating at 7 to 14 day intervals or as needed depending on disease severity. Do not exceed four applications per crop. Apply using ground spray equipment at no less than 50 gallons of spray solution per acre.			

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66615-3 Amended August 7, 2007/ Page21 of 24

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VINES

Crop	Disease	Rate	ppm's per 100 gallons of water	Instructions		
Grape	Black Rot, Downy Mildew, Phomopsis, Powdery Mildew	15-30 oz.	75-125 ppm	Begin applications at bud break with subsequent applications throughout the season depending on disease severity. Use the higher rates when conditions favor disease. NOTE: Foliage injury may occur on copper sensitive varieties such as Concord, Delaware, Niagara and Rosette.		
Hops	Downy Mildew	15 oz.	75 ppm	Make crown treatments after pruning, but before training. After Training, additional treatments are needed at about 10 day intervals. NOTE: Discontinue use two weeks before harvest.		
Kiwi	Erwinia herbicola, Pseudomonas flourescens, Pseudomonas syrinsae	45 oz.	150 ppm	Apply in 200 gallons of water per acre. Make applications on a monthly basis. A maximum of three applications may be made.		

MISCELLANEOUS

Crop	Disease	Rate	ppm's per 100 gallons of water	Instructions		
Atemoya	Anthracnose	25-35 oz.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.		
Carambola	Anthracnose	40-60 oz.	150-200 ppm	Make initial application before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.		
Chives	Downy Mildew	15 oz.	75 ppm	Begin application when plants are established in the field. Repeat every 7 to 10 days or as needed depending on disease conditions.		
Dill	Phoma Leaf Spot, Rhizoctonia Foliage Blight	15-25 oz. ACCEP' with COMP in EPA Lette FEB 9 2 der the Redent I	NENTS ir Dated 108 meeticide,	Begin applications when plants are first established in the field and repeat at 7-10 day intervals or as needed depending on disease severity and environmental conditions. Use the higher rates for severe disease.		

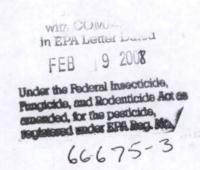
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MISCELLANEOUS (cont'd)

Plant	Disease	Rate	ppm's per 100 gallons of water	Instructions
Guava	Anthracnose, Red Algae	25-35 oz.	100-150 ppm	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
Litchi	Anthracnose	25-35 oz.	Make initial application just before flowering and repeat on a weekly schedule until just before harvest. Use the higher rates for severe disease.	
Macadamia	Anthracnose	46-65 oz.	150-250 ppm	Initiate sprays at first sign of flowering and repeat on a weekly schedule until just before harvest. Apply in sufficient water for thorough coverage. Use the higher rates for severe disease.
	Phytophthora Blight (P. capsici), Raceme Blight (Botrytis cinerea)	35-45 oz.	150-250 ppm	Apply during raceme development and bloom periods. Apply in sufficient water for thorough coverage. Use the higher rates when conditions favor disease.
Mamey Sapote	Algal Leaf Spot	45-60 oz.	150-250 ppm	Apply when conditions favor disease development. Repeat on a 14 to 30 schedule or as needed as disease severity and environmental conditions dictate. Use the higher rates when conditions favor disease.



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LIMITED WARRANTY AND LIMITATION OF REMEDIES

Seller warrants that the product conforms to the chemical description and is reasonably fit for the purpose stated on the label for use under normal conditions, but makes no other warranties of FITNESS or MERCHANTABILITY expressed or implied, or any other warranty if the product is used contrary to the label instructions or under abnormal conditions not foreseeable to the seller. In no case shall the seller be liable for more than the cost of the product to the buyer, and will in no event be liable for any consequential, special or indirect damages connected with the use or handling of this product. This product is offered and the buyer or user accepts it's subject to the foregoing terms which may not be varied.

With COMMENTS to EPA Letter Dated

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October 1, 2007

DOCUMENT PROCESSING DESK (AMEND)

Marshall Swindell
Product Manager Team 33
Regulatory Management Branch I
Antimicrobial Division (7504C)
Office of Pesticide Programs
United States Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave. NW
Washington, DC 20460



Dear Mr. Swindell:

Subject:

Magna-Bon Bahama Klear

EPA Reg. No. 66675-3

Adding usage directions for use as a bactericide/fungicide on agricultural

commodities in the field

Changing usage rates for post harvest wash Adding a statement regarding sulfur laden water. Adding CAS numbers and updating EPA wording

Enclosed you will find our amendment application, 5 draft copies and a highlighted copy of the label showing the following requested changes and additions. EPA changes in blue and our changes and additions in red:

On page 1, the CAS number has been added to the ingredients.

On page 2, For terrestrial use wording has been changed. Also, we have added wording regarding using Magna-Bon Bahama Klear with water containing moderate to high amounts of sulfur and how it may affect it.

On page 4, under the Post Harvest use we have increased the amount of product needed to be effective. Working with farmers, growers and processors, we have found in actual field usage the farmer or processor needs to use more Magna-Bon Bahama Klear to compensate for variables in water quality, whether from higher mineral counts in the water or the amount of dirt still coming off of the commodity, these new rates give the user more control without harming the commodities being washed. There is an exemption from the requirement of a tolerance for copper sulfate pentahydrate, post harvest, so the amount being used is not a problem.

Also starting on page 4, is the part of the amendment for use as an algicide/bactericide/fungicide on a wide variety of growing agricultural crops that we would like to have added to our label.

You will notice that we have added a chart listing ppm's (parts per million) and also have included a ppm column when showing rates for the product. We have found when using our product, because it is a liquid, the user can get a more precise usage rate when working with ppm's. As in citrus, we recommend having leaves tested for ppm's of copper present when using Magna-Bon Bahama Klear to "spot check" the amount of copper being utilized by the plant, making it possible to make adjustments in future spraying. In farming today, the technology is advancing everyday. The more information you can give a grower, the more control he can have in how and what he needs to spray, and using ppm's has greatly improved how growers spray their fields.

We hope you find these changes satisfactory. If you have any questions, please call our consultant, John Kennedy. He can be reached at his office 443-249-0100.

Sincerely,

Susan Wright General Manager

Sman Wo

Cc: JWK File

enclosures



October 1, 2007

Marshall Swindell
Product Manager Team 33
Regulatory Management Branch I
Antimicrobial Division (7504C)
Office of Pesticide Programs
United States Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave. NW
Washington, DC 20460

Dear Mr. Swindell:

Subject: Magna-Bon Bahama Klear Algicide/Bactericide

EPA Reg. No. 66675-3

Notification letter for addition to application

"This notification is consistent with the provisions PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the Confidential Statement of Formulation of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to the EPA. I further understand that if this notification is not consistent with the terms of PR Notice 95-2 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under Sec. 12 and 14 of FIFRA".

Sincerely,

Susan Wright General Manager

Susan Wi



Bryant Crowe/DC/USEPA/US 11/28/2007 12:29 PM To Linda Arrington/DC/USEPA/US@EPA

cc Tony Kish/DC/USEPA/US@EPA, Cynthia Giles-Parker/DC/USEPA/US@EPA

bcc

Subject Miscoded Prira action(#66675-3): A470, which should be

R...

Hi Linda,

This is a follow-up to the voicemail message that I left for you just moments ago. Again this matter involves a miscoded Prira action, which is rightfully an RD/FB action, because it involves a shared AI (copper), between AD/PM33 & RD/PM22 branches, it was mistakenly coded for AD. Likely the time frame is, also, incorrect, along with the billing fee. These are issues that we must get corrected, as soon as possible. If you are unable to resolve this issue, before taking leave, please send this email to the appropriate staff member.

Thanks,

Bryant



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

October 10, 2007

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

PLEASE RETURN A COPY OF THIS LETTER WITH PAYMENT OR PAY ON-LINE AT www.Pay.Gov

OPP Decision Number: D-384848

EPA File Symbol or Registration Number: 66675-3 Product Name: MAGNA-BON BAHAMA KLEAR

EPA Receipt Date: 03-Oct-2007 EPA Company Number: 66675

Company Name: MAGNA-BON II, LLC

SUSAN WRIGHT MAGNA-BON II, LLC 1531 NW 25TH DRIVE OKEECHOBEE, FL 34972

SUBJECT: Receipt of Amendment and 75% Small Business Waiver Request

Dear Registrant:

The Office of Pesticide Programs has received your amendment and 75% small business waiver request. If you submitted data with this application, the results of the PRN-86-5 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: A470

NEW USE; WITH TOLERANCE; NEW FOOD USE;

Your request for waiver has been forwarded for review. You will be notified in writing when a determination is made regarding your request. If your waiver request is approved, the decision review time period will start on either the date of approval or the receipt of payment, whichever is later. If you would like to avoid delaying the start date, you may pay the amount listed below at this time. If your waiver request is denied, you will receive an invoice for the outstanding balance.

Please remit payment in the amount of: \$ 6,563 to:

By USPS:

USEPA Washington Finance Center Pesticide Registration Service Fee PO Box 979074 St. Louis, MO 63197-9000 By Courier: U.S. Bank Government Lockbox 979074 1005 Convention Plaza SL-MO-C2-GL St. Louis, MO 63197 Telephone: (412) 236-2294

All payments must be in United States currency by check, bank draft, or money order drawn to the order of the Environmental Protection Agency. To ensure proper credit, please write the OPP DECISION NUMBER on your check, and enclose a copy of this letter with your payment.

Effective November 1, 2006, fees may be paid on-line via credit card or electronic fund transfer. To submit a payment on-line, visit www.pay.gov. From the pay.gov home page, select "search by form name." From the next page, select "P," then click on "Pesticide Registration Improvement Act. Fee Payment" and complete the form, making certain to use the decision number and registration number on the invoice you receive from the Pesticide Program in the space provided.

A PRIA decision time review period will not start until a fee waiver is granted and/or the Agency receives certification that the outstanding fee has been paid. If the Agency does not receive certification of payment for this action or a fee waiver request within the next 45 days, the Agency will presume that you no longer want to pursue this action. The Agency will then initiate a process that may result in administrative withdrawal of this action.

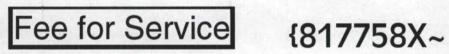
If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 308-6432.

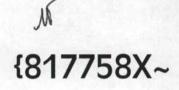
Sincerely,

Front End Processing Staff

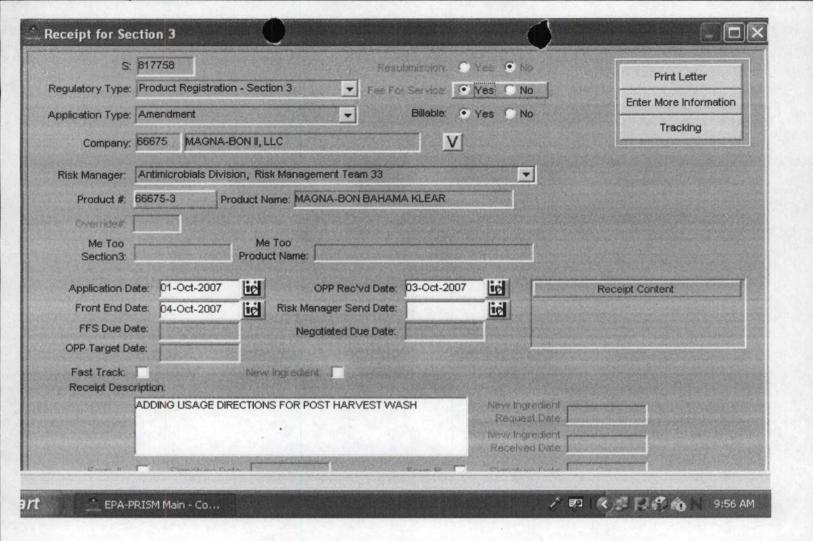
Information Technology & Resources Management Division

he has





This package includes the following New Registration Amendment Studies? Fee Waiver? volpay % Reduction:	for Division AD BPPD RD Risk Mgr. 33			
Receipt No. S- EPA File Symbol/Reg. No. Pin-Punch Date:	817758 66675-3 10/3/2007			
This item is NOT subject t	o FFS action.			
Action Code:	Parent/Child Decisions:			
Requested: Granted: A 470 Amount Due: \$ 26,250				
Inert Cleared for Intended Use	Uncleared Inert in Product			
Reviewer: Henson	Date: 10-5-07			
Remarks:				



OMB No. 2070-0060. Approval expires 2-28-95 Form Approve



United States

	Registration
/	Amendment
	Other

OPP Identifier Number

EPA	Environmental Protection Agency Washington, DC 20460			1	Amendm Other	ent		
	Appl	lication for F	Pesticide	- Section				
1. Company/Product Numb Magna-Bon II, LLC /	66675-3		Marshall	Swindell	William .	3. Pro	oposed Classification None Restricted	
4. Company/Product (Name) Magna-Bon Bahama Klear			#33				, _	
5. Name and Address of Applicant (Include ZIP Code) Magna-Bon II, LLC 1531 NW 25th Drive Okeechobee, Fl. 34972-2046 Check if this is a new address			6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. Magna-Bon Bahama Klear					
		Sec	tion - II					
Notification - Explain	sponse to Agency letter dated		-	inal printed label gency letter dat Me Too" Applica Ither - Explain be	ed .	to		
This amendment is to add a	onal page(s) if necessary. (For a usage as a bactericide/fungici gredients and change other EPA	ide on growing agri A language. Please	icultural comr e see attache		the usage rate	s for the p	post-harvest wash section	
		Sect	tion - III					
1. Material This Product W Child-Resistant Packaging Yes No Certification must be submitted	Unit Packaging Yes ✓ No If "Yes" No.		Section of the second section of the second section of the second section sect	No. per container	2. Type of C	Container Metal Plastic Glass Paper Other (S		
3. Location of Net Contents ✓ Label	s Information 4. Siz	ze(s) Retail Contair 1, 2.5, 30, 55,		11	cation of Labe	I Directio	ons	
6. Manner in Which Label is	s Affixed to Product	Lithograph Paper glued Stenciled		Other				
		Secti	ion - IV					
1. Contact Point (Complet	e items directly below for iden	ntification of indivi	idual to be c	ontacted, if nec	essary, to pro	cess this	application.)	
Name Title Susan Wright Genera						Telephone 1-800-84	e No. (Include Area Code) 5-1357	
Certification I certify that the statements I have made on this form and all attacl I acknowledge that any knowlingly false or misleading statement m both under applicable law.							6. Date Application Received (Stamped)	
2. Signature 3. Title Gener			al Manager					
4. Typed Name 5. Date Susan Wright			10/1/2007					